

SELF-PERCEPTIONS OF IOWA PUBLIC SCHOOL SUPERINTENDENTS
TOWARD OCCUPATIONAL STRESS

A Dissertation
Presented to
The School of Graduate Studies
Drake University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
James S. Botts

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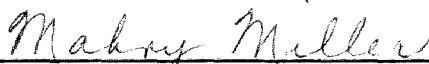
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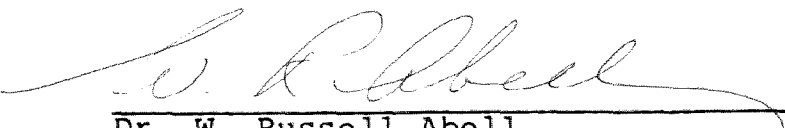
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An abstract of a Dissertation by
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Advisor: Dr. Barry Steim

The problem. The purpose of this study was to determine (1) the frequency and intensity of occupational sources of stress as perceived by Iowa public school superintendents, (2) the relationship between perceived occupational sources of stress and demographic variables, and (3) stress management techniques used by superintendents.

Procedure. The modified Administrative Stress Index was mailed on October 14, 1985, to forty randomly selected Iowa public school superintendents who represented four school district enrollment categories. Respondents identified the frequency and intensity of thirty-five stressors on two separate five-point Likert-type scales and provided pertinent demographic information. Data were analyzed using the Statistical Package for the Social Sciences.

Conclusion. Results from the study show a difference in the total mean intensity of stressors among age groups of superintendents. There was no difference in the mean frequency of stressors among age groups. There was no difference in the mean frequency or the mean intensity of stressors by five categorical stress factors, superintendency roles, college degree levels, district sizes, district descriptors, number of years in the present position, total number of years in administration, number of hours worked per week, number of hours of physical exercise per week, and the level of physical health. Of the twenty-three hypotheses in the study, all were accepted at the .05 level of significance with the exception of one.

Recommendations. Research might determine the duration of the stressors, correlation between stress and additional demographic variables, and contributing factors related to high stress levels among school superintendents.

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CHAPTER ONE

Introduction

Stress has been a component of life throughout the existence of mankind. Various experiences in life may produce desirable or undesirable amounts of stress. Many individuals are stimulated by a moderate amount of stress while an excessive amount of stress may create emotional, social, and physical ailments. In the early 1980's, a group health representative for approximately five hundred national corporations reported that industry is losing more than one billion dollars yearly on problems related to stress, resulting in low productivity, loss of time, accidents, and medical costs. Alcohol and drug abuse often occur as a reaction to stress, costing an additional forty-two billion dollars a year.¹

Occupational or job-related stress affects every individual involved in the world of work. Occupational stress is becoming the "Great Plague" of current times, not unlike the epidemic which dominated the Middle Ages.²

¹Winifred Albizu Melendez and Rafael M. de Guzman, Burnout: The New Academic Disease (Washington, D.C.: ASHE, 1983), pp. 10-11.

²Walter H. Gmelch, "The Principal's Next Challenge: The Twentieth Century Art of Managing Stress," NASSP Bulletin, 62 (Feb. 1978), 5.

During the past decade, the study of stress in the field of education has become a prominent topic.

School administrators occupy stressful managerial positions. According to Anthony Cedoline,

Educational administrators of the 1980's are beset by more change, conflict, and stress than in any single decade since schools came into being. More responsibilities and duties are crammed into the administrator's day than ever before.¹

School superintendents are the chief administrative officers of school organizations and are held accountable for the performance of the schools in a time when education is a prime target of public criticism. Financial cutbacks and declining student enrollment require serious budget decisions. Superintendents must comply with complex legislative constraints.

Little research has been conducted dealing with stress and the public school superintendent. Iowa public school superintendents must recognize the existence and sources of stress before being able to cope with it in the superintendency.

Statement of the Problem

Since there has been no study regarding the self perceptions of Iowa public school superintendents toward occupational stress, a study of this topic is timely. The

¹Anthony J. Cedoline, Job Burnout in Public Education: Symptoms, Causes, and Survival Skills (New York: Teachers College Press, 1982), p. 72.

purpose of the study will be to determine (1) the frequency and intensity of occupational sources of stress as perceived by Iowa public school superintendents, (2) the relationship between perceived occupational sources of stress and demographic variables, and (3) stress management techniques used by superintendents.

Research Questions

The following research questions will direct this study:

1. What is the frequency to which each of the stressors exists among Iowa public school superintendents?
2. What is the intensity to which each of the stressors exists among Iowa public school superintendents?
3. What is the total mean frequency to which stress exists among Iowa public school superintendents by geographic location?
4. What is the total mean intensity to which stress exists among Iowa public school superintendents by geographic location?
5. What percentage of total stress in the life of a superintendent in Iowa is estimated to be a result of the superintendent's job?
6. What various stress coping techniques have been used by Iowa public school superintendents?

Statement of the Hypotheses

The following hypotheses will be tested:

1. There will be no difference in frequency and intensity between the thirty-five stressors among Iowa public school superintendents.
2. There will be no difference in the mean frequency of the five factors identified by Swent¹ (Appendix A) among Iowa public school superintendents.
3. There will be no difference in the mean intensity of the five factors identified by Swent² (Appendix A) among Iowa public school superintendents.
4. There will be no difference in the total mean frequency of stressors among the five identified age groups of Iowa public school superintendents.
5. There will be no difference in the total mean intensity of stressors among the five identified age groups of Iowa public school superintendents.
6. There will be no difference in the total mean frequency of stressors among the five identified superintendency roles of Iowa public school superintendents.
7. There will be no difference in the total mean intensity of stressors among the five identified

¹Boyd James Swent, "An Exploratory Study of the Perceptions of Oregon School Administrators on Occupational Sources of Stress," Diss. Univ. of Oregon, 1978, p. 4.

²Ibid.

superintendency roles of Iowa public school superintendents.

8. There will be no difference in the total mean frequency of stressors among the three identified college degree levels among Iowa public school superintendents.

9. There will be no difference in the total mean intensity of stressors among the three identified college degree levels among Iowa public school superintendents.

10. There will be no difference in the total mean frequency of stressors among the four identified district sizes among Iowa public school superintendents.

11. There will be no difference in the total mean intensity of stressors among the four identified district sizes among Iowa public school superintendents.

12. There will be no difference in the total mean frequency of stressors among the three identified district descriptors among Iowa public school superintendents.

13. There will be no difference in the total mean intensity of stressors among the three identified district descriptors among Iowa public school superintendents.

14. There will be no difference in the total mean frequency of stressors in relationship to the number of years in the present position among Iowa public school superintendents.

15. There will be no difference in the total mean intensity of stressors in relationship to the number of years in the present position among Iowa public school

superintendents.

16. There will be no difference in the total mean frequency of stressors in relationship to the total number of years in administration among Iowa public school superintendents.

17. There will be no difference in the total mean intensity of stressors in relationship to the total number of years in administration among Iowa public school superintendents.

18. There will be no difference in the total mean frequency of stressors in relationship to the number of hours worked per week among Iowa public school superintendents.

19. There will be no difference in the total mean intensity of stressors in relationship to the number of hours worked per week among Iowa public school superintendents.

20. There will be no difference in the total mean frequency of stressors in relationship to the number of hours of physical exercise per week among Iowa public school superintendents.

21. There will be no difference in the total mean intensity of stressors in relationship to the number of hours of physical exercise per week among Iowa public school superintendents.

22. There will be no difference in the total mean

frequency of stressors in relationship to a self-identified level of current physical health among Iowa public school superintendents.

23. There will be no difference in the total mean intensity of stressors in relationship to a self-identified level of current physical health among Iowa public school superintendents.

Significance of the Study

The superintendency is a stressful position. A study of stress in the superintendency is relevant in Iowa because of current economic conditions. Superintendents are required to make stressful financial decisions in order to balance school budgets. Some superintendents are being asked to manage two school districts and others are the sole administrator in a district.

An awareness of the perceptions of Iowa public school superintendents regarding the frequency and intensity of sources of stress will be useful in planning local and state stress management in-service programs and workshops for administrators. As superintendents become more aware of stress and stress management, the school organizational climate may improve for the superintendent and staff.

Definition of Terms

The following terms to be used in this study will be defined:

1. Stress. "Stress is the state manifested by a specific syndrome which consists of all the nonspecifically-induced changes within a biologic system."¹ Selye's definition was considered the most appropriate definition for this study.

2. Stressor. Any external or internal agent which produces stress.²

3. Occupational stress. A condition arising from the interaction of people and their jobs and is characterized by changes within people that force them to deviate from their normal functioning.³

4. Frequency. Frequency refers to the number of times a stressor occurs.

5. Intensity. Intensity is the degree of sensitivity of a stressor upon respondents.

6. Coping. One's behavioral response to reduce stress.

Assumptions

The following assumptions will be made in the study:

1. Superintendents will accurately report their perceptions of occupational stress.

¹Hans Selye, The Stress of Life (New York: McGraw-Hill, 1978), p. 64.

²Ibid., p. 78.

³Jere E. Yates, Managing Stress (New York: AMACOM, 1979), p. 19.

2. The Administrative Stress Index, as modified, will be a valid instrument to use for the purpose of the study.

Limitations

The study will be limited to stress as perceived by superintendents currently serving public schools in Iowa. Research will rely upon voluntary self-reporting through a questionnaire and responses may be influenced by recent experiences. The superintendents will answer the survey on one particular date or time in their life. Data will be limited to a set number of identified stressors listed on the questionnaire.

Organization of the Study

The study will consist of five chapters. Chapter One will provide the background of the topic, statement of the problem, research questions, statement of the hypotheses, significance of the study, definition of terms, assumptions, and limitations. Chapter Two will review literature relevant to the study. Chapter Three will describe the sample and population, instrumentation, data collection, and the analysis of the data. Chapter Four will present a narrative description with accompanying tables to depict the data. Chapter Five will summarize the study and present possible implications for future research.

CHAPTER TWO

Review of Literature

The twentieth century has been called the Age of Stress.¹ This century has been characterized by incredible changes. Karl Albrecht discussed five major changes that have contributed greatly to stress.² The changes in society included a shift from rural to urban living, from stationary to mobile, from self-sufficiency to consumerism, from isolation to interconnectedness, and from physically active to sedentary.³

As more stress is experienced, the interest in it is reflected in the overwhelming amount of information available. Approximately 80,000 articles have been written, 1,000 research projects have been completed, and each year 6,000 additional publications are classified under the heading of stress.⁴ A review of selected literature and

¹Stephen Truch, Teacher Burnout and What to do About It (Novato, CA: Academic Therapy, 1980), p. 47.

²Karl G. Albrecht, Stress and the Manager: Making it Work for You (Englewood Cliffs, NJ: Prentice-Hall, 1979), pp. 7-24.

³Ibid., p. 8.

⁴William T. Randall, Stress Management for Educators: Resource Guide (ERIC ED 193 788), p. iv.

research will concentrate on the following: nature of stress, occupational stress, stress in education, and personal stress management.

Nature of Stress

Various theories and much research exist which explain the nature of stress. The following topics are important to gain a better understanding of the nature of stress: the evolution of the stress concept, the definition of stress, the stress response, and stress and illness.

Evolution of the Stress Concept

The concept of stress is very old. Prehistoric man probably instinctively recognized his stress response resulting from a variety of dissimilar situations. Since the art of daily survival was uppermost in the mind of early man, he was not concerned with termination or theoretical explanation of the stress response which was vital to survival.¹

Early civilization applied the stress concept in the treatment of physical diseases and mental disorders. Treatments may have included strong drugs, painful bandages, bloodletting, inducing fevers, and flogging to expel disease-causing demons from the body.²

¹Hans Selye, Stress Without Distress (New York: Signet Books, 1974), pp. 21-22.

²Selye, The Stress of Life, pp. 6-7.

Twenty-four centuries ago in ancient Greece, Hippocrates taught that the body possessed a vis medicatrix naturae, or a healing of nature, which cured from within the body. Hippocrates recognized the existence of inherent bodily mechanisms for restoring health which occurred after exposure to disease.¹

From the fourteenth century through the nineteenth century the term stress and its variants denoted the hardship, adversity or affliction with reference to a person. During the eighteenth and nineteenth centuries, stress evolved as an engineering term to mean the force, pressure or strain with reference to objects.²

The modern concept of stress may be traced back to the middle of the nineteenth century to a French physiologist, Claude Bernard. Bernard contended that the internal environment of the human body must maintain a degree of consistency, milieu interieur, despite changes in the external environment in order to resist disease. Bernard was the first to recognize the potential dysfunctional consequences of upsetting the balance of, or stressing, the body.³

¹Selye, The Stress of Life, p. 11.

²Cary L. Cooper and Judi Marshall, Understanding Executive Stress (New York: Petrocelli Book, 1977), pp. 2-3.

³John M. Ivancevich and Michael T. Matteson, Stress and Work: A Managerial Perspective (Glenview, IL: Scott, Foresman, 1980), p. 4.

The studies of Bernard concerning adaptive changes by which the steady state in the body is maintained was revived in the 1920's by Walter Cannon, a Harvard physiologist. Cannon introduced the term "homeostasis" as the means by which the body, using hormonal feedback, preserves a state of equilibrium despite environmental stressors.¹ Cannon was the first to describe the physiological reaction to stress as "fight or flight."²

Although Cannon used the term "stress," the modern usage of stress is not associated with Cannon but with Hans Selye, frequently referred to as "the father of stress."³ In 1936, Selye introduced his concept of stress in the British journal entitled Nature. In the article, "A Syndrome Produced by Diverse Nocuous Agents," Selye did not use the term "stress."⁴ A "syndrome produced by various nocuous agents" subsequently became known as the General Adaptation Syndrome (GAS).⁵ In 1950, Selye wrote the first book entitled Stress devoted exclusively to the subject of stress.⁶ A landmark book, The Stress of Life, by Selye

¹Yates, p. 22.

²Cedoline, p. 2.

³Ivancevich and Matteson, p. 4.

⁴Selye, The Stress of Life, p. 36.

⁵Selye, Stress Without Distress, pp. 25-26.

⁶Ogden Tanner et al., Stress (Alexandria, VA: Time-Life Books, 1976), p. 15.

created a world-wide interest in stress and has served as a foundation for most subsequent research.¹

Until the past two decades, stress researchers were medical doctors who studied the physical stimuli and consequences of stress. More recently, behavior scientists are exploring psychological stressors.²

Definition of Stress

As a result of centuries of work by past researchers, modern man, unlike early man, has an understanding of the stress concept. Yet few individuals can define stress. Stress is one of the most frequently used words in the English language, but it is also one of the least understood words.³

Due to the multiple uses, references, and definitions, the exact meaning of stress remains ambiguous. Some terms which have negative connotation such as anxiety, frustration, strain, conflict, and tension are frequently associated with stress.⁴ Swent and Gmelch noted that individuals tend to think of stress in terms of pressure

¹Albrecht, p. 68.

²Ivancevich and Matteson, p. 5.

³Yates, p. 19.

⁴Walter H. Gmelch, Beyond Stress to Effective Management (ERIC ED 140 440), pp. 6-7.

situations and nervous encounters.¹ Gmelch defined stress as "any event that places a demand on your body, mentally or physically."² According to Richard Lazarus:

stress resides neither in the situation nor in the person; it depends on a transaction between the two. It arises from how the person appraises an event and adapts to it. Stress is what occurs when the demands of the environment, in the person's eyes, clearly exceed the resources of the person to handle them.³

Organ stated that stress is most often viewed either as something which should be avoided or as a necessary evil.⁴ Greenberg defined stress as the "physical, mental, or emotional reaction resulting from an individual's response to environmental tensions, conflicts, pressures, and other stimuli."⁵

Stress, although typically defined in negative terms, may be thought of positively. The Chinese use two symbols to express the concept of stress. One symbol represents danger and the other symbol represents opportunity.⁶

¹Boyd Swent and Walter H. Gmelch, Stress at the Desk and How to Creatively Cope (ERIC ED 146 698), p. 7.

²Gmelch, Beyond Stress to Effective Management, p. 5.

³Daniel Goleman, "Positive Denial: The Case for Not Facing Reality," Psychology Today, 13 (Nov. 1979), 52.

⁴Dennis W. Organ, "The Meaning of Stress," Business Horizons, 22 (June 1979), 32-33.

⁵Sheldon F. Greenberg, Stress and the Teaching Profession (Baltimore: Paul H. Brookes, 1984), p. 2.

⁶Cedoline, p. 1.

Gmelch presented three aspects of stress. Negative stress was associated with the terms worry, pressure, anxiety, and tension. Neutral stress described words, attitudes, and behaviors that evoked negative feelings at first but if handled correctly become neutral. Terms representing neutral stress were money, people, schedules, and criticism. Positive stress may be described by the terms love, children, challenge and excitement.¹ Selye emphasized that there must be a differentiation between the unpleasant or harmful variety of stress which he called distress and pleasant stress known as eustress.²

According to John Ivancevich and Michael Matteson, most definitions of stress may be classified in one of three categories: stimulus definitions, response definitions, or stimulus-response definitions.³ Stimulus definitions are similar to engineering definitions of stress and treat stress as an external event or situation in the environment that causes a potentially disruptive consequence. An example of a stimulus definition is: "Stress is the force or stimulus acting upon the individual that results in a response of strain."⁴ Response definitions of stress

¹Gmelch, Beyond Stress to Effective Management, p. 6-7.

²Selye, The Stress of Life, p. 74.

³Ivancevich and Matteson, p. 6.

⁴Ibid.

emphasize the internal response an individual makes to potential stressful demands. A definition in this category is: "Stress is the physiological or psychological response an individual makes to an environmental stressor."¹

Stimulus-response definitions represent a combination of the two previous approaches and emphasize the relationship between the person and the environment while recognizing the critical role of individual differences. Stress might be defined as ". . . the consequence of the interaction between an environmental stimulus and the idiosyncratic response of the individual."²

Ivancevich and Matteson defined stress as:

an adaptive response, mediated by individuals' characteristics and/or psychological processes, that is a consequence of any external action, situation or event that places special physical and/or psychological demands upon a person.³

Individual characteristics included age, sex, race, and health. Individual attitudes, beliefs, and values were included in psychological processes.⁴

Selye reflected that he was at first tempted to define stress as the "rate of wear and tear" in the body.⁵ Later,

¹Ivancevich and Matteson, p. 7.

²Ibid., p. 8.

³Ibid., pp. 8-9

⁴Ibid., p. 9.

⁵Selye, The Stress of Life, p. 1.

Selye defined stress as "the nonspecific response of the body to any demand made upon it."¹ By "nonspecific" he meant that the response pattern was independent of the stressor. Although each stressor produced its own specific changes in the body, all stressors produced additional nonspecific effects. According to Selye, the sum total of these nonspecific effects common to all stressors is stress.²

Stress Response

Human beings have a general response to all forms of stress. The stress response pattern was studied by Dr. Walter Cannon who called it the "fight-or-flight" response. Later Selye explained the stress response in terms of the General Adaptation Syndrome.

The "fight-or-flight" response evolved as a reaction to physical danger and the basic drive for self-preservation.³ The individual responds to stress either by fighting or fleeing from it. The biochemical process automatically modifies the body for whichever action is determined most appropriate.⁴ The body undergoes the following changes

¹Selye, Stress Without Distress, p. 14.

²Albrecht, pp. 59-60.

³James W. Greenwood III and John Greenwood, Jr., Managing Executive Stress: A System Approach (New York: John Wiley, 1979), pp. 92-93.

⁴Yates, pp. 20-21.

through the transmissions of the sympathetic and parasympathetic nervous systems:

stored sugar and fats pour into the bloodstream to provide fuel for quick energy; the breath rate shoots up, providing more oxygen; red blood cells flood the bloodstream, carrying more oxygen to the muscles of the limbs and the brain; the heart speeds up and blood pressure soars, insuring sufficient blood supply to needed areas; blood-clotting mechanisms are activated to protect against injury; muscles tense in preparation for strenuous action; digestion ceases, so blood may be diverted to muscles and brain; perspiration and saliva increase; triggered by the pituitary gland, the endocrine system steps up hormone production; bowel and bladder muscles loosen; adrenalin pours into the system, as do the hormones epinephrin and norepinephrin; the pupils dilate, allowing more light to enter; all senses are heightened.¹

The nervous system still responds the same way when an individual encounters a stressor. However, social conventions and organizational policies expect people to respond in a dignified, calm, accepting manner. During the prolonged fight-or-flight bodily readiness, stress begins to have a detrimental effect on health.²

Selye referred to the cultural modification of the "fight-or-flight" response as the General Adaptation Syndrome.³ According to Selye,

¹Philip Goldberg, Executive Health: How to Recognize Health, Danger Signals and Manage Stress Successfully (New York: McGraw-Hill, 1978), pp. 26-27.

²Ivancevich and Matteson, pp. 10-11.

³Gmelch, Beyond Stress to Effective Management, p. 14.

While stress is reflected by the sum of the nonspecific changes which occur in the body any one time, the general adaptation syndrome (or GAS) encompasses all nonspecific changes as they develop throughout time during continued exposure to a stressor.¹

The GAS consists of three states: the alarm reaction, the stage of resistance, and the stage of exhaustion.² Everyone experiences the first two stages many times. During the alarm reaction, various biochemical changes activate within the body to prepare the body for fight or flight.³

The body cannot maintain a continuous state of alarm so the second stage, the stage of resistance, occurs. The body's defenses are mobilized and adaptive strategy is at its peak resisting the agent producing the stress.⁴

The stage of exhaustion occurs following continuous exposure to stress when an individual's adaptation energy, which is finite, is exhausted. If there is no alternative system with which to defend the body against the stressor, death is the result.⁵

Stress and Illness

Although the correlation between stress and illness is a relatively new phenomenon, many researchers in the medical

¹Selye, The Stress of Life, p. 79.

²Selye, Stress Without Distress, pp. 26-27.

³Selye, The Stress of Life, pp. 36-37.

⁴Ibid., p. 329.

⁵Selye, Stress Without Distress, pp. 26-27.

field have acknowledged a direct relationship between illness and stress. Stress-related diseases have become the major causes of death in our society. Barbara Brown stated that "the chances of every single person incubating a stress disease are approaching 100 percent."¹

Research confirmed numerous diseases resulting from the body's response to stress. Selye discussed the close relationship of the diseases of the kidney, heart, and blood vessels with the degree of stress experienced.² Through experimentation, Selye concluded that stress is a significant factor in causing and escalating inflammatory diseases such as arthritis and other rheumatic and rheumatoid diseases, inflammatory diseases of the skin and the eyes, infectious diseases, and allergies and hypersensitivity diseases.³ Other diseases that have as great a relationship to the amount of stress experienced as to heredity and physical injury are diseases of the nervous system, sexual derangements, digestive diseases, and metabolic diseases.⁴ Selye believed that the relationship between stress and cancer deserves additional research.⁵

¹Barbara B. Brown, Between Health and Illness: New Notions on Stress and the Nature of Well Being (Boston: Houghton Mifflin, 1984), p. 140.

²Selye The Stress of Life, pp. 179-212.

³Ibid., pp. 213-46.

⁴Ibid., pp. 247-76.

⁵Ibid., pp. 271-72.

In researching to determine whether changes in a person's life could be statistically correlated with the onset of illness, Holmes and Rahe developed the Social Readjustment Rating Scale as illustrated in Table 1.¹ Life events were ranked according to the severity of the adjustment that is necessary in order to successfully cope with negative as well as positive events. The research considered only the disruptive impact of the life events. Holmes and Rahe discovered a strong relationship between major health changes and life events measured by units or "life change units." The more events that placed new demands on the usual adaptive patterns of the individual, the greater the risk of illness.² Yates calculated the relationship between the number of Life Change Units accumulated in a year and the chance of a serious health change in the next year.³ If an individual has 150 or fewer points, there is a 33 percent chance of a serious health change in the next year. Chances of a health change rise to 50 percent if 150 to 300 points are accumulated and an accumulation of over 300 points indicates an 80 to 90 percent chance for illness.⁴

¹Thomas H. Holmes and Richard H. Rahe, "The Social Readjustment Rating Scale," Journal of Psychosomatic Research, 11 (Aug. 1967), 213-16.

²Ibid., pp. 215-17.

³Yates, pp. 80-81.

⁴Ibid.

TABLE 1 SOCIAL READJUSTMENT RATING SCALE

Rank	Life event	Mean value
1	Death of spouse	100
2	Divorce	73
3	Marital separation	65
4	Jail term	63
5	Death of close family member	63
6	Personal injury or illness	53
7	Marriage	50
8	Fired at work	47
9	Marital reconciliation	45
10	Retirement	45
11	Change in health of family member	44
12	Pregnancy	40
13	Sex difficulties	39
14	Gain of new family member	39
15	Business readjustment	39
16	Change in financial state	38
17	Death of close friend	37
18	Change to different line of work	36
19	Change in number of arguments with spouse	35
20	Mortgage over \$10,000	31
21	Foreclosure of mortgage or loan	30
22	Change in responsibilities at work	29
23	Son or daughter leaving home	29
24	Trouble with in-laws	29
25	Outstanding personal achievement	28
26	Wife begin or stop work	26
27	Begin or end school	26
28	Change in living conditions	25
29	Revision of personal habits	24
30	Trouble with boss	23
31	Change in work hours or conditions	20
32	Change in residence	20
33	Change in schools	20
34	Change in recreation	19
35	Change in church activities	19
36	Change in social activities	18
37	Mortgage or loan less than \$10,000	17
38	Change in sleeping habits	16
39	Change in number of family get-togethers	15
40	Change in eating habits	15
41	Vacation	13
42	Christmas	12
43	Minor violations of the law	11

Source: Holmes and Rahe, p. 214.

Regardless of the cause of stress, whether pleasant or unpleasant, Selye discussed certain medical symptoms and self-observable signs common to any kind of stress.¹ Selye pointed out that although a certain amount of stress is needed to give purpose to life, medical symptoms and signs will serve as warnings that an individual's endurance has reached its limit.² Medical symptoms are fairly reliable indicators of stress reactions, but they must be determined and interpreted by experts. Medical symptoms consist of the blood levels of adrenalin, corticoids, ACTH and a drop in blood eosinophils; electrical activity of the brain; the level of blood pressure; and the electrical conductivity of the skin.³

Selye listed thirty-one signs of stress an individual may recognize. An individual tends to respond with a particular set of warning signs that are caused by malfunctioning of the most vulnerable parts of the body, and when the signs appear, it is time to change or stop the activity.⁴ The danger signs are:

1. General irritability, hyperexcitation, or depression.
2. Pounding of the heart, an indicator of high blood pressure.
3. Dryness of the throat and mouth.
4. Impulsive behavior, emotional instability.

¹Selye, The Stress of Life, p. 171.

²Ibid.

³Ibid., pp. 171-72.

⁴Ibid., pp. 173-74.

5. The overpowering urge to cry or run and hide.
6. Inability to concentrate, flight of thoughts and general disorientation.
7. Feelings of unreality, weakness, or dizziness.
8. Predilection to become fatigued, and loss of the "joie de vivre."
9. "Floating anxiety," that is to say, we are afraid although we do not know exactly what we are afraid of.
10. Emotional tension and alertness, feeling of being "keyed up."
11. Trembling, nervous ticks.
12. Tendency to be easily startled by small sounds, etc.
13. High-pitched, nervous laughter.
14. Stuttering and other speech difficulties.
15. Bruxism, or grinding of the teeth.
16. Insomnia.
17. Hypermotility.
18. Sweating.
19. The frequent need to urinate.
20. Diarrhea, indigestion, queasiness in the stomach, and sometimes even vomiting.
21. Migraine headaches.
22. Premenstrual tension or missed menstrual cycles.
23. Pain in the neck and lower back.
24. Loss of or excessive appetite.
25. Increased smoking.
26. Increased use of legally prescribed drugs, such as tranquilizers or amphetamines.
27. Alcohol and drug addiction.
28. Nightmares.
29. Neurotic behavior.
30. Psychoses.
31. Accident proneness.¹

Occupational Stress

Work occupies a major part of an individual's life in terms of both time and importance. According to McLean "the changing nature and meaning of work has been the cause of the greatest continuing restructuring of American lives of

¹Selye, The Stress of Life, pp. 174-77.

any force in our history."¹ Since work is often stressful at times, it is not surprising that occupational stress is an important contemporary issue.

Newman and Beehr defined job stress as

a situation wherein job-related factors interact with the worker to change (i.e., disrupt or enhance) his or her psychological and/or physiological condition such that the person (i.e., mind-body) is forced to deviate from the normal functioning.²

Margolis and Kroes emphasized that the job-related factors interacting with the worker are significant.³ Research and observation clearly prove that individuals respond to identical job factors in different ways.⁴

Due to the great amount of time spent in job and career-related activities, Matteson and Ivancevich concluded that "Negative health consequences of stress are probably experienced more frequently in the work world than anywhere else."⁵

¹Alan McLean, "The Corporate Environment and Stress," in Stress in Health and Disease, ed. Michael R. Zales (New York: Brunner/Mazel, 1985), p. 147.

²John E. Newman and Terry A. Beehr, "Personal and Organizational Strategies for Handling Job Stress: A Review of Research and Opinion," Personnel Psychology, 32 (Spring 1979), 20.

³Bruce K. Margolis and William H. Kroes, "Occupational Stress and Strain," in Occupational Stress, ed. Alan McLean (Springfield, IL: Charles C. Thomas, 1974), p. 15.

⁴Ibid.

⁵Michael T. Matteson and John M. Ivancevich, Managing Job Stress and Health: The Intelligent Person's Guide (New York: Free Press, 1982), p. 30.

Matteson and Ivancevich cited several examples of typical research findings on the relationship between stress, disease, and work.¹ Findings published in journals in the last ten years include:

45 percent of a sample of coronary patients put in more than 60 hours a week on their jobs.

Reported job stress was associated with high cholesterol levels, increased heart rate, and increased smoking.

Blood pressure was higher among employees who reported that they did not completely understand what their superiors expected of them.

Having "responsibility for people" on the job is more likely to lead to heart disease than having "responsibility for things."

Executives who were poor delegators had 8 times as many ulcers as good delegators.

White collar workers reporting dissatisfaction with their jobs were 5 times as likely to use prescription tranquilizers as were similar workers reporting satisfaction.

Members of high stress occupations (such as physicians and police officers) have suicide rates 2 to 6 times as high as that of the general population.

Foremen experienced twice as many ulcers as did workers one level below and above them in the company.²

Individuals employed in the human service or helping professions are particularly vulnerable to the negative

¹Matteson and Ivancevich, p. 36.

²Ibid.

effects of stress.¹ Among the occupations which provide human services are attorneys, physicians, teachers, nurses, social workers, police officers, clergymen, and counselors. Greenberg and Valletutti listed certain characteristics of human service professionals which increase their vulnerability to the dysfunctional effects of stress:

1. Become deeply involved in the lives and well-being of others,...
2. Wield some degree of control in directing the activities of others.
3. Are regularly exposed to human grief, deprivation, struggle, and failure, as well as to the inability of others to cope adequately with their daily functions--mental, physical, or emotional.
4. Spend long, usually irregular, hours accomplishing specific job tasks.
5. Are expected to or expect to perform a variety of activities, many of which may not be directly related to his or her specific function....
6. Are expected to be familiar with and able to make referrals to a variety of resource agencies.²

To more clearly understand the implications of stress at work, a framework for the study of occupation stress and selected environmental stressors deserve study. The

¹Sheldon F. Greenberg and Peter J. Valletutti, Stress and the Helping Professions (Baltimore: Paul H. Brookes, 1980), pp. 3-5.

²Ibid., pp. 5-6.

Person-Environment Fit theory explores the goodness of fit between the environment and the person. The model of stress at work developed by Cooper and Marshall is one of the most popular models of occupational stress. Common occupational stressors are: role ambiguity, role conflict, role overload, and responsibility.

Person-Environment Fit Theory

The Person-Environment Fit theory developed by French, Cobb, and Rodgers is one of the most widely accepted models of occupational stress.¹ The theory involves two kinds of fit between the individual and the environment. One kind of fit is the extent to which the individual's skills and abilities match the demands and requirements of the job. Another type of fit is the extent to which the job environment provides to meet the needs of the individual.² Either form of misfit will cause occupational stress which may cause job dissatisfaction, depression, physiological strains, and poor mental health.³

To measure the goodness of fit between the individual and the job, the individual is asked to respond to two similar scales of questions.⁴ For example, the individual

¹John R. P. French, Jr., "Person Role Fit," in Occupational Stress, ed. Alan McLean (Springfield, IL: Charles C. Thomas, 1974), p. 70.

²Ibid.

³Ibid.

⁴Ibid.

rates the quality of his or her job environment along a quantitative scale for a question, such as, "the responsibility you have for the work of others." On the same scale, the individual is also asked to rate "the responsibility he or she would like to have for the work of others."¹ The quantitative score of the goodness of fit is derived by subtracting the actual score for the job environment from the desired score on the same dimension of the job environment.²

Model of Stress at Work

Cooper and Marshall developed a model of stress at work as illustrated in Figure 1.³ The model divides the possible environmental sources of stress at work into five categories. The first potential source of stress is factors intrinsic to the job which includes poor physical working conditions, work overload, time pressures, and physical danger.⁴ Noise and crowding are two conditions that are most often associated with poor physical working conditions.⁵ Yates asked managers to identify key stressors

¹French, p. 70.

²Ibid.

³Cary L. Cooper and Judi Marshall, "Occupational Sources of Stress: A Review of the Literature Relating to Coronary Heart Disease and Mental Health," Journal of Occupational Psychology, 49 (March 1976), 12.

⁴Ibid., p. 14.

⁵Yates, pp. 39-40.

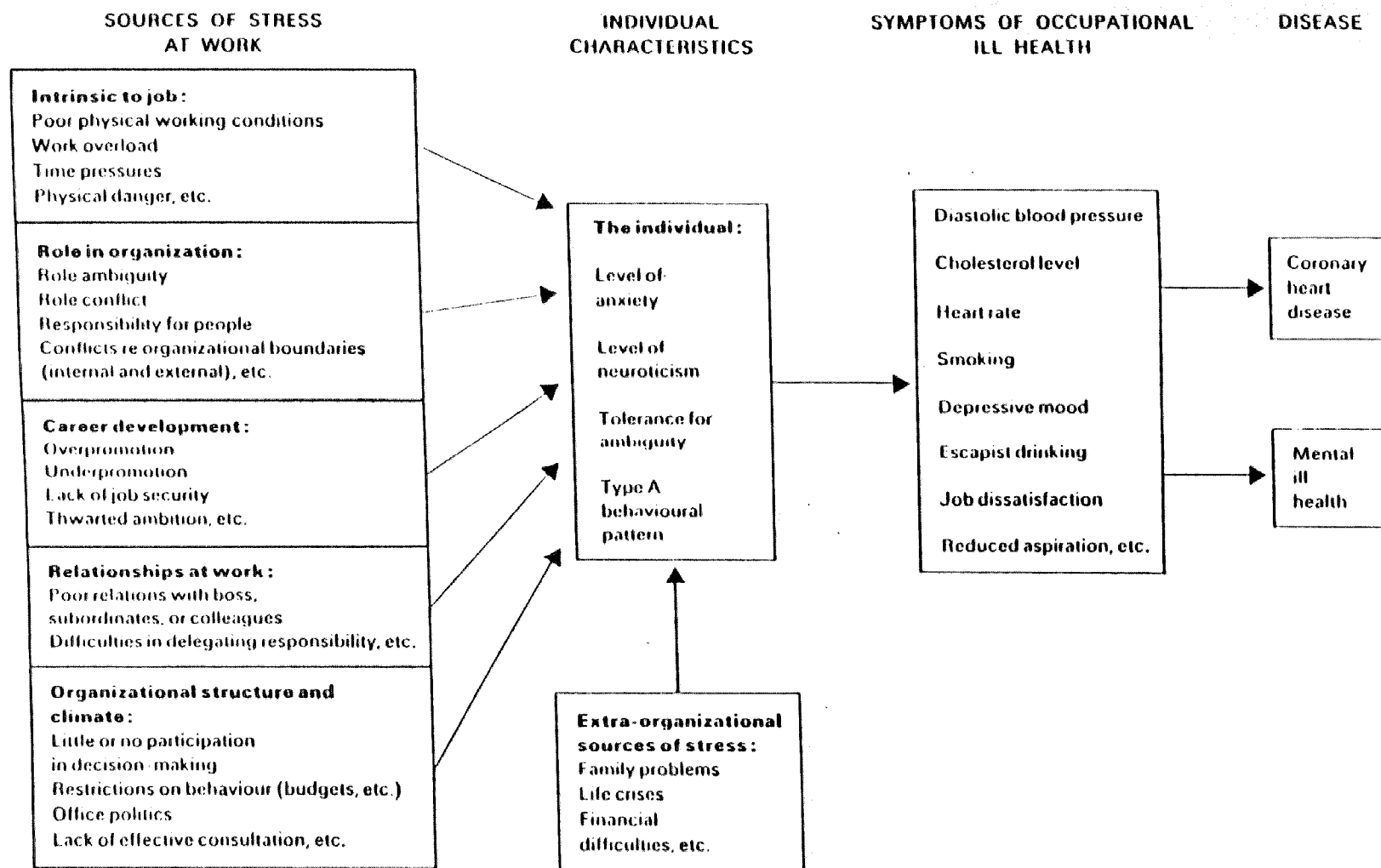


Figure 1
A Model of Stress at Work

Source: Cooper and Marshall, p. 12.

in the organization and the most frequent response was time pressures and deadlines.¹

The second source of stress at work is the individual's role in the organization. Role ambiguity, role conflict, and responsibility for people have received much attention in research.²

The third environmental stressor is career development which refers to the impact of overpromotion, underpromotion, lack of job security, and thwarted ambition.³ Cooper and Marshall cited studies that suggested the mismatching of an individual's abilities with job requirements may lead to behavioral and mental disorders.⁴

The fourth source of stress at work is relationships at work.⁵ Many behavioral scientists believed that good relationships with one's boss, subordinates, and colleagues are important to both individual and organizational health.⁶

The fifth potential stressor is organizational structure and climate. Aspects of organizational structure are little or no participation in decision making, restrictions on behavior, office politics, and lack of

¹Yates, p. 42.

²Cooper and Marshall, "Occupational Sources of Stress," pp. 16-17.

³Ibid., p. 18.

⁴Ibid.

⁵Ibid., p. 19.

⁶Yates, p. 51.

effective consultation.¹ French and Caplan have summarized the results of several studies on the effect of little or no participation in decision making of employees. They concluded that the individual's psychological well-being may be greatly influenced by the amount and quality of participation in environmental decisions.²

Sources of stress at work evoke various reactions from different individuals. Cooper and Marshall considered the level of anxiety, level of neuroticism, tolerance for ambiguity, and Type A behavioral pattern as individual characteristics which account for various reactions to stressors.³

In the early 1960's, two coronary heart disease researchers, Meyer Friedman and Diane Ulmer, began the development of an approach to predicting coronary disease, focusing on behavioral responses to environmental stimuli.⁴ Type A and Type B were the results of their research.⁵

¹Cooper and Marshall, "Occupational Sources of Stress," p. 20.

²John R. P. French, Jr., and Robert D. Caplan, "Organizational Stress and Individual Strain," in The Failure of Success, ed. Alfred J. Marrow (New York: AMACOM, 1973), pp. 49-53.

³Cooper and Marshall, "Occupational Sources of Stress," p. 12.

⁴Meyer Friedman and Diane Ulmer, Treating Type A Behavior and Your Heart (New York: Alfred A. Knopf, 1984), pp. 3-6.

⁵Ibid., pp. 3-8.

According to Friedman and Rosenman, the major cause of coronary heart disease is a complex of emotional reactions, designated Type A Behavior Pattern.¹

The most significant trait of the Type A person is his habitual sense of time urgency or "hurry sickness."² Other characteristics of a Type A individual are the need to achieve, aggressiveness, hostility, and competitiveness.³ Approximately half of the people in the United States consist of Type A personalities.⁴ Several writers have suggested that stress and Type A behavior are synonymous.⁵

Occupational Stressors

There are numerous possible environmental sources of stress at work. The occupational stressors that have been extensively researched are: role ambiguity, role conflict, role overload, and responsibility.

Role ambiguity. Role ambiguity is the degree to which information is available regarding the expectations associated with an occupational role.⁶ The extent to which

¹Meyer Friedman and Ray H. Rosemman, Type A Behavior and Your Heart (New York: Fawcett Columbine, 1981), p. 57.

²Ibid., p. 70.

³Ibid., pp. 72-77.

⁴Yates, pp. 64-65.

⁵Ivancevich and Matteson, p. 181.

⁶Robert Louis Kahn et al., Organizational Stress: Studies in Role Conflict and Ambiguity (Malabar, FL: Robert E. Krieger, 1981), p. 25.

an individual will experience ambiguity depends on the clarity of the scope, objectives, expectations, and responsibilities associated with the role.¹ In a national survey, more than a third of the labor force was disturbed by the lack of information necessary for the performance of their jobs or for the attainment of their personal goals.²

According to Brief, Schuler, and Van Sell, possible causes of role ambiguity have been documented by research in organizations. A negative relationship exists between role ambiguity and the degree of work formalization, amount of feedback, closeness of supervision, allowed participation in goal setting, tenure in the organization, and the task-structuring behavior of the supervisor.³

Kahn and others found that men who suffered from role ambiguity experience lower job satisfaction, higher job-related tension, greater futility, and lower self-confidence. Role ambiguity was also associated with low trust and low liking for co-workers.⁴

In a sample of engineers, scientists, and administrators at the Goddard Space Flight Center, French

¹Cooper and Marshall, Understanding Executive Stress, p. 24.

²Kahn et al., p. 79.

³Arthur Brief, Randall S. Schuler, and Mary Van Sell, Managing Job Stress (Boston: Little, Brown, 1981), p. 81.

⁴Kahn et al., pp. 85-86.

and Caplan found that role ambiguity was significantly related to low job satisfaction and to feelings of job-related threat to mental and physical well-being. Role ambiguity was associated with indicators of physical and mental health such as increased blood pressure and pulse rate.¹

A number of significant relationships between symptoms of physical and mental ill health with role ambiguity were found by Margolis, Kroes, and Quinn in a national survey. Stress indicators related to role ambiguity were depressed mood, lowered self-esteem, life dissatisfaction, job dissatisfaction, low motivation to work, and intention to leave the job.²

Role conflict. Role conflict as a source of occupational stress has probably been studied more extensively than any other stressor.³ Role conflict is defined as "the incongruity of expectations associated with a role."⁴ Various behaviors, attitudes, and often personal appearances are associated with every occupational role.

¹John R. P. French, Jr., and Robert D. Caplan, "Psychosocial Factors in Coronary Heart Disease," Industrial Medicine and Surgery, 39 (Sept. 1970), 383-85.

²Bruce K. Margolis, William H. Kroes, and Robert P. Quinn, "Job Stress: An Unlisted Occupational Hazard," Journal of Occupational Medicine, 16 (Oct. 1974), 659-61.

³Yates, p. 44.

⁴Brief, Schuler, and Van Sell, p. 79.

Role conflict exists when an individual in a role attempts to comply with two or more conflicting sets of pressure or when an individual is expected to behave in certain ways which conflict with personal beliefs and philosophies.¹

Kahn et al. identified four basic types of role conflict: intra-sender conflict, inter-sender conflict, inter-role conflict, and person-role conflict.² Intra-sender role conflict occurs when an individual is asked to achieve two objectives that are incompatible. An example might be when a supervisor requests an employee to acquire material which is unavailable through normal channels and at the same time prohibits violations of normal channels.³ Inter-sender conflict exists when demands from one role sender oppose demands from one or more other senders. Inter-sender conflict describes a situation such as the conflicting pressures a foreman experiences from superiors and subordinates concerning the degree of supervision.⁴ Inter-role conflict occurs when role pressures in one organization conflict with role pressures in other organizations. Often this type of role conflict describes the conflict an individual experiences in the role of worker

¹Brief, Schuler, and Van Sell, p. 79.

²Kahn et al., pp. 19-20.

³Ibid.

⁴Ibid., p. 20.

versus the role of a family member.¹ Person-role conflict exists when organizational role requirements are in conflict with basic values, demands, and abilities of an individual. Pressures on an executive to enter price-fixing conspiracies when the activity opposes his personal code of ethics is an example of person-role conflict.²

Research shows that individuals who suffered role conflict experience a lack of job motivation and satisfaction, anxiety, tension, frustration, and decreased confidence in superiors and in the organization.³ French and Caplan found that the mean heart rate for an individual was strongly related to his report of role conflict.⁴

Role overload. One of the dominant forms of role conflict is role overload. French and Caplan have defined and differentiated quantitative and qualitative overload. Quantitative overload refers to having "too much to do" because of time limitations while qualitative overload means work that is "too difficult" considering the abilities, skills, and knowledge of the individual.⁵

Overload is associated with activities that have

¹Kahn et al., p. 20.

²Ibid.

³Ibid., pp. 65-71.

⁴French and Caplan, "Psychosocial Factors in Coronary Heart Disease," pp. 389-93.

⁵French and Caplan, "Organizational Stress and Individual Strain," p. 40.

negative effects on the individual and the organization. The study by Margolis, Kroes, and Quinn found overload was significantly related to escapist drinking, increased absenteeism from work, low motivation to work, lowered self-esteem, and an absence of suggestions to employers.¹

French and Caplan reviewed the findings from several studies and from the Goddard study showing that overload produced at least nine different kinds of psychological and physiological strain in the individual. They are job tension, skin resistance, low self-esteem, threat, embarrassment, high cholesterol, increased heart rate, job dissatisfaction, and increased cigarette consumption.² The last four strains are known risk factors in heart disease.³ French and Caplan concluded that a reduction in work overload will probably reduce the incidence of heart disease.⁴

Responsibility. Responsibility is a stressor associated with an individual's organizational role. Responsibility is often categorized as responsibility for people and responsibility for things. Responsibility involving people includes their work schedules, their rewards, and their futures. Responsibility for things

¹Margolis, Kroes, and Quinn, pp. 659-61.

²French and Caplan, "Organizational Stress and Individual Strain," pp. 41-45.

³Ibid., p. 44.

⁴Ibid., p. 57.

involves working with budgets, equipment, and projects.¹

Research indicated that responsibility for people, particularly for people's future, is more likely to produce stress and lead to stress-related illnesses than responsibility for things. One of the earliest studies supporting this concept was conducted by Wardwell, Hyman, and Bahnson. They found that responsibility for people was significantly more likely to lead to heart disease than responsibility for things.²

Cobb reviewed evidence and summarized his findings involving licensing renewal examinations for air traffic controllers regarding responsibility for people and certain diseases.³ Cobb concluded that there is

evidence that diabetes, hypertension and myocardial infarction as well as peptic (presumably duodenal) ulcer are unduly common among persons subject to heavy, close personal responsibility for the lives of other people.⁴

In the NASA Goddard study, French and Caplan found that the more time an individual spends carrying out responsibility for other people, the more likely he or she was to smoke heavily, have high blood pressure, and have

¹Sidney Cobb, "Role Responsibility: The Differentiation of a Concept," in Occupational Stress, ed. Alan McLean (Springfield, IL: Charles C. Thomas, 1974), p. 63.

²Walter L. Wardwell, Merton M. Hyman, and Claus B. Bahnson, "Stress and Coronary Heart Disease in Three Field Studies," Journal of Chronic Disease, 17 (Jan. 1964), 81-82.

³Cobb, pp. 63-69.

⁴Ibid., p. 68.

elevated cholesterol counts. Whereas, the more responsibility for things, the lower were each of these coronary heart disease risk factors.¹

Individuals who have great responsibility for other people spend large amounts of time interacting with people in meetings and over the phone which results in less amounts of time to work alone and meet deadlines.² This often results in overload and perhaps role conflict and ambiguity.³ On the other hand, responsibility for things has very little, if any, effect on other stressors.⁴

Stress in Education

Stress is a recognized aspect of various occupations and has become a major issue in the field of education. According to Smith and Milstein,

stress is one of the hottest topics being debated among educators today....However, stress is far from a new phenomenon. It has vexed educators for at least much of the present century and will probably continue to be one of our major concerns for the foreseeable future.⁵

¹French and Caplan, "Organizational Stress and Individual Strain," p. 48.

²Ibid., p. 47.

³Ivancevich and Matteson, p. 115.

⁴French and Caplan, "Organizational Stress and Individual Strain," p. 47.

⁵Dorothy Smith and Mike M. Milstein, "Stress and Teachers: Old Wine in New Bottles," Urban Education, 19 (April 1984), 39.

Anthony J. Cedoline cited seven major causes of job burnout which have received the most attention in the literature on stress in business and industry.¹ Factor analytic studies and rank order studies have shown significant relationships between the seven causes of burnout and perceived occupational stress.² Cedoline assigned perceived stressors identified by educators, including teachers and administrators, to one of the following major causes of burnout: lack of control over one's destiny; lack of occupational feedback and communication; work overload or underload; contact overload; role conflict/ambiguity; individual factors; and training deficiencies.³

Regardless of position or level, no educator can escape occupational stress. Research has confirmed the existence of stress in the educational setting and has identified sources of stress for teachers, all levels of administrators, and for superintendents.

Teacher Stress

Teaching is recognized as a highly stressful occupation. Survey results indicated that "teaching may be the third most stressful occupation on earth, following air

¹Cedoline, p. 40.

²Ibid.

³Ibid., pp. 77-107.

traffic controllers and surgeons."¹ Some surveys have shown that 90 percent of the responding teachers felt some stress and 95 percent indicated the need for stress management courses.² Teachers recognized the need of stress management courses because dedicated teachers exposed to prolonged stress risk become "neurotically frenzied, battle-fatigued, physically injured, or burned out."³ Willard McGuire, National Education Association President, believed that community awareness of teacher stress is necessary:

A major new malady has afflicted the teaching profession and threatens to reach epidemic proportions if it isn't checked soon. It has already stricken thousands of sensitive, thoughtful, and dedicated teachers....It is teacher burnout--a condition that results from stress, tension and anxiety in its victims....The NEA is hopeful, however, that once the teacher burnout problem is articulated to the community, it will get the attention it deserves....Teachers need support from parents; school administrators; school boards; and civic, business, labor, religious and professional societies. If teachers don't get that support, the price may be more than society can afford to pay.⁴

Sources of stress for teachers have been reviewed in educational literature and were the subject of numerous

¹Truch, p. 1.

²Ibid., citing C. Wilson, Survey Conducted in San Diego (San Diego, CA: Department of Education, 1979), n.p.

³Alfred S. Alschuler et al., eds., Teacher Burnout (Washington, D.C.: National Education Association, 1980), p. 6.

⁴Willard McGuire, "Teacher Burnout," Today's Education, 68 (Nov./Dec. 1979), 5.

studies.

After reviewing the literature from the 1930's to the 1980's, Smith and Milstein concluded that stress has been a continuing concern of educators over the past half century.¹ As sources of stress have increased, job satisfaction has decreased. Teachers are retiring earlier or leaving the profession and choosing other careers.² Sources of stress for teachers come from the environment as frequently as they come from individual shortcomings.³ Stress-related issues that have concerned educators during the past half century and continue to do so are: rewards by years in the profession rather than by achievement, little opportunity for collegial feedback, role conflicts, little control by teachers over decisions affecting their work, lack of career ladders, preservice training that appears to be inadequate or irrelevant, perception that many administrators are poorly prepared, or at least do not seem to care, and the failure of school districts to protect teachers in basic survival areas.⁴

Greenberg emphasized that one of the first sources of stress experienced by many educators is the realization that their expectations differ greatly from the reality of

¹Smith and Milstein, pp. 39-46.

²Ibid., p. 46.

³Ibid., p. 40.

⁴Ibid., p. 48.

teaching.¹ Another source of teacher stress in many school systems is the lack of a clearly defined role resulting in ambiguity and conflict about the role which leads to increased anxiety and decreased productivity.² Numerous stressors that are an inherent part of the teacher's routine daily tasks are curriculum decision, classroom discipline, evaluation of student performance, attending meetings, extra-curricular programs, and instructional preparation.³ Greenberg pointed out that the primary sources of teacher stress can, in some way, be directly attributed to administration.⁴ A few of the most frequently cited categories of stress related to administration are: policies and procedures, work schedules, inconsistency, accountability for decisions, evaluation systems, dress codes, work overload, lack of communication, and budget and fiscal support.⁵

In an editorial in 1979, McGuire listed violence and vandalism, disruptive students, inadequate salaries, involuntary transfers, interfering parents, oversized classes, and excessive paperwork as sources causing teacher stress, tension, and anxiety resulting in teacher

¹Greenberg, pp. 13-18.

²Ibid., pp. 21-30.

³Ibid., pp. 31-37.

⁴Ibid., p. 58.

⁵Ibid., pp. 59-60.

burnout.¹ According to NEA's 1979 nationwide Teacher Opinion Poll, one out of every twenty teachers was physically attacked by students on school property during the 1978-1979 school year representing an increase of 57 percent of the number of teachers attacked during the 1977-1978 school year.² Approximately one-fourth of the respondents in the poll reported they had personal property stolen.³ McGuire cited a teacher opinion poll which revealed that one-third of those teaching now wouldn't go into teaching if they were given the choice again and that the number of teachers with twenty years or more experience had dropped by nearly half in the past fifteen years.⁴

From experiences in workshops and conversations with teachers, Sparks and Hammond reviewed some of the prominent causes of teacher stress and burnout.⁵ Poor quality relationships with students, parents, administrators, and colleagues was a frequent complaint. Teachers were stressed by a sense of isolation since they spent most of the workday isolated with students in classrooms. Teachers felt a responsibility in situations yet had little or no control and experienced a sense of powerlessness. Stress was caused

¹McGuire, p. 5.

²Ibid.

³Ibid.

⁴Ibid.

⁵Dennis Sparks and Janice Hammond, Managing Teacher Stress and Burnout (Washington, D.C.: ERIC Clearinghouse on Teacher Education, 1981), p. 4.

as a result of role conflict and time management problems. Institutional practices and policies were common sources of stress among teachers. Public criticisms of teachers and schools undermined teacher morale and caused stress.¹

In a recent study involving a group of K-6 public school teachers employed in the central midwest, Raschke asked respondents to rank order eleven major sources of stress for teachers previously identified from the literature.² The identified stressors in rank order were:

1. Lack of time to accomplish tasks
2. Disruptive students
3. Nonteaching duties
4. Student apathy
5. Dealing with multiability students
6. Financial pressures
7. Lack of support from parents/community
8. Lack of positive feedback from administrators
9. Lack of input into curricular/administrative decisions
10. Lack of recognition for teaching excellence
11. Lack of colleague support³

Litt and Turk surveyed a group of full time, regular classroom high school teachers in Connecticut with five to fifteen years of experience.⁴ In this study, teacher stress was treated as a multidimensional phenomenon consisting of

¹Sparks and Hammond, pp. 4-8.

²Donna B. Raschke et al., "Teacher Stress: The Elementary Teacher's Perspective," The Elementary School Journal, 85 (March 1985), 560.

³Ibid., p. 562.

⁴Mark D. Litt and Dennis C. Turk, "Sources of Stress and Dissatisfaction in Experienced High School Teachers," Journal of Educational Research, 78 (Jan./Feb. 1985), 179.

job satisfaction, absenteeism, intention to leave teaching, and negative well-being.¹ Results suggested that role conflict and particularly the relationship with supervisors were significantly associated with job stress.² Teachers reported that "they were distressed by the lack of feedback provided by their supervisors regarding their performance and felt unable to influence supervisors' decision making in matters that directly affect them."³ Some commonly cited stressors were confirmed, such as inadequate salary, low status of the teaching profession, and too much paperwork.⁴

Levitov and Wangberg developed and administered the Teacher Stress Scale to a random sample of K-12 teachers in a large urban system.⁵ After analyzing the data, Levitov and Wangberg identified the following nine factors of teacher stress and job dissatisfaction: burnout/dissatisfaction, environment, work rewards, "caretaker" personality, "other" control, physical symptoms, overload, perfection, and health habits.⁶ Results showed that elementary and secondary teachers perceived certain

¹Litt and Turk, p. 180.

²Ibid., p. 183.

³Ibid.

⁴Ibid.

⁵Justin Levitov and Elaine Wangberg, "Identifying Factors of Teacher Stress and Job Dissatisfaction," Thrust, 12 (Feb./March 1983), 20.

⁶Ibid.

identified stress areas differently. Elementary teachers perceived less stress from overall teaching environment and burnout than did secondary teachers. However, elementary teachers perceived significantly more stress than secondary teachers concerning workload and "other" control, such as little control over what and how to teach and little participation in decision making.¹

Hawkes and Dedrick at the University of Northern Iowa conducted an on-going two-year study of teacher stress.² Teachers were surveyed twice, a year and a half apart, at all grade levels and in all subject fields. The respondents represented a complete professional cross-section and various school sizes. When comparing the results of the order of stressful items in the two surveys, Hawkes and Dedrick found that the professional and economic conditions of the times were reflected in the rank of the most stressful items. Financial pressure moved upward from fifth position on the first survey to third position in the second survey.³ The second study concluded, even more so than the first, that teachers want feedback from administrators, want to be a part of the decision-making process, and want the

¹Levitov and Wangberg, p. 20.

²Richard R. Hawkes and Charles V. Dedrick, "Teacher Stress: Phase II of a Descriptive Study," NASSP Bulletin, 67 (March 1983), 78.

³Ibid., p. 79.

support of parents and community.¹

Sources of Stress for School Administrators

Many school administrators, like teachers, are choosing either a career change or early retirement resulting from occupational stress.² In the past decade administrators have acquired many new responsibilities. The problems and demands of being an administrator have increased, while the satisfaction has diminished.³ As an example, according to Cedoline, the average school administrator is requested to make approximately four hundred decisions a day; is responsible for the supervision and evaluation of forty to fifty individuals; and spends over 80 percent of his or her time in direct contact with people.⁴ Piatt stated that administrators are now in what is called a high-risk stress category.⁵ Research on sources of stress for administrators reflected the complexity and demands of the position of the school administrator.

Piatt pointed out there are probably as many reasons for stress as there are administrators.⁶ However, there are

¹Hawkes and Dedrick, p. 82.

²Cedoline, pp. 72-73.

³Ibid., p. 75

⁴Ibid., pp. 84-86.

⁵James G. Piatt, "Stress and the School Administrator," Thrust for Educational Leadership, 10 (Jan./Feb. 1981), 14.

⁶Ibid., p. 13.

eight common stress elements which Piatt discussed that appear to be an effect upon most administrators. They are person/position match, brain processing mismatch, uncertainty, work overload, work underload, interpersonal tension, excess competition, and external pressure. Piatt suggested that many administrators are not suited for administrative positions because their personality makeup is geared to working with children and not adults. They cannot handle being criticized continuously, dealing with crisis events, and the number and intensity of pressure groups.¹

For a study of 1,200 Oregon school administrators in 1977, Swent developed the Administrative Stress Index (ASI) which is an instrument to obtain the perceptions of administrators on thirty-five typical school related situations.² Administrators reported the ten highest perceived individual stressors in rank order as:

1. Complying with state, federal, and organizational rules and policies
2. Feeling that meetings take up too much time
3. Trying to complete reports and other paper work on time
4. Trying to gain public approval and/or financial support for school programs
5. Trying to resolve parent/school conflicts
6. Evaluating staff members' performance
7. Having to make decisions that affect the lives of individual people I know (colleagues, staff members, students, etc.)

¹Piatt, pp. 13-14.

²Swent, "An Exploratory Study of the Perceptions of Oregon School Administrators on Occupational Sources of Stress," pp. 21-26.

8. Feeling that I have too heavy a work load, one that I cannot possibly finish during the normal work day
9. Imposing excessively high expectations on myself
10. Being interrupted frequently by telephone calls¹

For analysis, the thirty-five individual stressors were grouped into five categories representing stressor areas. Stressors included in the administrative constraints category were perceived to be the most bothersome with the top three individual stressors falling in this area. The remaining four categories in rank order were: administrative responsibility, interpersonal relations, intrapersonal conflict, and role expectations.² Nearly half of the respondents perceived that 71 to 90 percent of their stress came from their jobs.³

A replication of the Oregon study was conducted by Cook in 1979 to determine the causes of job-related stress for public school administrators in Wyoming.⁴ The ten most stressful individual stressors as ranked by all administrative groups were:

1. Complying with state, federal, and organizational rules and policies
2. Feeling that meetings take up too much time

¹Swent, "An Exploratory Study of the Perceptions of Oregon School Administrators on Occupational Sources of Stress," pp. 62-63.

²Ibid., pp. 40-41.

³Ibid., p. 37.

⁴Gerald L. Cook, "Administrative Stress and Coping Behavior of Wyoming Public School Administrators," Diss. Univ. of Wyoming, 1980, p. 8.

3. Trying to complete reports and other paper work on time
4. Having to make decisions that affect the lives of individual people that I know (colleagues, staff members, students, etc.)
5. Evaluating staff members' performance
6. Being interrupted frequently by telephone calls
7. Trying to resolve parent/school conflicts
8. Imposing excessively high expectations on myself
9. Feeling I have to participate in school activities outside of the normal working hours at the expense of my personal time
10. Feeling that the progress of my job is not what it should be or could be¹

Each of the following five general stress categories were represented in the top ten stressors: administrative constraints, intrapersonal conflict, interpersonal relations, role expectations, and administrative responsibility.² However, the category of administrative constraints was represented four times among the top ten stressors.³

Swent's study also served as a basis for a study of stress demands on school administrators in Tennessee.⁴ Responding to the ASI in Brimm's study were 258 elementary principals, 75 junior high and 121 secondary principals, 61 superintendents, 94 supervisors of instruction, and 54 other school officials.⁵ Although ranking somewhat differently,

¹Cook, p. 60.

²Ibid., pp. 55-60.

³Ibid., p. 60.

⁴Jack Brimm, Stress Demands on Educational Administrators (Nashville: Tennessee School Board Association, 1981), p. 4.

⁵Ibid.

eight of the top ten stressors identified in Swent's study were identified by the Tennessee administrators as being most stressful. The top ten stressors as ranked by Tennessee administrators were:

1. Compliance with rules
2. Decisions affecting colleagues
3. Resolving parent-school conflicts
4. Evaluating staff
5. Telephone calls
6. Completing reports on time
7. Gaining public support
8. Participation in school activities
9. Progress on the job
10. Heavy work load¹

As in the studies by Swent and Cook, Brimm reported that stressors categorized as constraints to administration were perceived as causing the most stress.² Over 50 percent of the administrators indicated that more than 70 percent of their total life stress resulted from their work.³

Sources of Stress for Superintendents

School superintendents must deal daily with high amounts of stress. Rodney Wells, after conducting research on stress of superintendents, concluded that "stress and the superintendency are inevitable, unavoidable, and inseparable. It is implicit in the very nature of the position."⁴

¹Brimm, pp. 5-6.

²Ibid., p. 5.

³Ibid., p. 8.

⁴Rodney E. Wells, "Superintendent Stress: The Best Cure Is...", Journal of the New York State School Boards Association, Inc., July 1982, p. 10.

Acknowledging that stress is an inherent part of the superintendency, Anthony Saville and George Kavina questioned 276 school superintendents during the summer of 1979 in thirteen western states.¹ Saville and Kavina identified forty-one potentially stressful situations and asked superintendents to rank the factors according to the amount of stress they caused in their careers. The ten situations which created the most stress were:

1. Negotiations
2. Interaction with the school board as a formal power group
3. Community pressures
4. Dealing with overall district financial matters
5. Legal issues
6. Dealing with specific financial crises, such as tax levies and bond issues
7. Disagreements between the school board's and the superintendent's concepts of school operations
8. Internal organizational problems and issues
9. Confrontations with the board over an important issue
10. Interaction with individual board members²

A replication of the Saville and Kavina study was conducted by William Gall for randomly selected public school superintendents in North and South Dakota.³ Stressors perceived by the respondents in rank order as being highly distressful were:

¹Anthony Saville and George Kavina, "Use Stress to Improve Your Job Performance," The Executive Educator, 4 (April 1982), 18.

²Ibid., p. 19.

³William Douglas Gall, "Job-Related Stress Factors Among Selected Public School Superintendents in North Dakota and South Dakota," Diss. Univ. of South Dakota, 1982, p. 4.

1. Negotiations
2. Dealing with overall district financial matters
3. Dealing with specific financial crises: tax levies, bond issues, etc.
4. Interaction with the Board as a formal power group
5. Community pressures
6. Pressures caused by degree of compatibility with your concepts of operations and those of the Board
7. Confrontation with the Board on an important issue
8. Confrontation with a parent or group of parents
9. Internal organizational problems and issues (communications, interaction, relations with subordinates)
10. Your own salary negotiations¹

Gall's findings were similar to the results of the Saville and Kavina study. Although not ranked exactly the same, from the ten greatest sources of stress as perceived by superintendents in the Saville and Kavina study, eight were perceived most stressful by North and South Dakota superintendents in Gall's study.²

In Swent's study of the perceptions of Oregon school administrators on occupational sources of stress, 110 respondents were superintendents.³ The superintendents ranked their ten most stressful situations as follows, with two situations given equal rankings by the respondents:

1. Complying with policies
2. Gain public approval
3. Collective bargaining
4. Complete paper work
5. Meetings
6. Affect the lives of people

¹Gall, p. 54.

²Ibid.

³Swent, "An Exploratory Study of the Perceptions of Oregon School Administrators on Occupational Sources of Stress," p. 30.

7. Expectations on self
8. Evaluate staff
9. Too heavy work load
10. Negotiated contracts¹

Superintendents perceived stressors in the administrative constraints category to be the most bothersome with a mean score of 2.82 on a five-point scale. Following the category of administrative constraints were the categories of administrative responsibility with a mean score of 2.64, intrapersonal conflict with a mean score of 2.34, and interpersonal relations with a mean score of 2.18.² Statistical significance for role expectation was not found in the study.

In the study of administrative stress of Wyoming school administrators, thirty-eight respondents were superintendents.³ Cook reported the following ten most stressful stressors as ranked by superintendents:

1. Complying with state, federal, and organizational rules and policies
2. Trying to complete reports and other paper work on time
3. Having to make decisions that affect the lives of individual people that I know (colleagues, staff members, students, etc.)
4. Feeling staff members don't understand my goals and expectations
5. Feeling that meetings take up too much time
6. Imposing excissively high expectations on myself

¹Swent, "An Exploratory Study of the Perceptions of Oregon School Administrators on Occupational Sources of Stress," pp. 67-68.

²Ibid., pp. 41-59.

³Cook, p. 57.

7. Trying to gain public approval and/or financial support for school programs
8. Preparing and allocating budget resources
9. Being interrupted frequently by telephone
10. Being involved in the collective bargaining process¹

Wyoming superintendents, like Oregon superintendents, ranked the stress category of administrative constraints as the number one stress category followed by administrative responsibility, intrapersonal conflict, interpersonal relations and role expectations.²

According to the sixty-one Tennessee superintendents who participated in Brimm's study, the following ten stressors in rank order were perceived as most bothersome:

1. Complying with state and federal rules and policies
2. Trying to gain public approval for school programs
3. Being involved in the collective bargaining process
4. Trying to resolve parent-school conflict
5. Preparing and allocating budget resources
6. Being interrupted frequently by telephone calls
7. Having to make decisions that affect the lives of people
8. Feeling that the progress on my job is not what it should be
9. Trying to complete reports and other paper work on time
10. Feeling that meetings take up too much time³

Brimm pointed out that tasks which were perceived as stressful for superintendents related to job responsibilities normally assigned to that administrative

¹Cook, p. 62.

²Ibid., p. 57.

³Brimm, p. 10.

position. Brimm stated:

superintendents were bothered by tasks such as complying with state and federal rules and policies, trying to gain public approval and support for school programs, and preparing and allocating budget resources. A superintendent is responsible for overseeing a school system's compliance with existing laws, for selling the school program to parents and the community, and for supervising the budgetary process. The complexity of these tasks, as well as the frustration associated with them, is apparent, but they simply go "with the territory."¹

In a study to examine the demands of various groups that Texas school superintendents must deal with and the resulting stress created for the superintendent by each, Myers found that the group which caused the greatest amount of stress for superintendents of all size school districts is the local board of education.² The Texas superintendents who answered the modified ASI in 1982 indicated the ten greatest individual stressors in rank order were:

1. Having to make decisions that affect the lives of individual people that I know (colleagues, staff members, students, etc.)
2. Trying to resolve parent/school conflicts
3. Being interrupted frequently by telephone
4. Trying to gain public approval and/or financial support for school programs
5. Complying with state, federal, and organizational rules and policies
6. Preparing and allocating budget resources

¹Brimm, p. 7.

²Thomas C. Myers, "An Exploratory Study of the Perceptions of Texas Public School Superintendents on Occupational Sources of Stress," Diss. North Texas State Univ., 1983, p. 79.

7. Feeling I have to participate in school activities, outside of the normal working hours at the expense of my personal time
8. Imposing excessively high expectations on myself
9. Writing memos, letters, and other communications
10. Feeling pressure for better job performance over and above what I think is reasonable¹

The two highest-ranking stressors were in the area of interpersonal relations. Nearly 44 percent of the responding Texas superintendents perceived that 71 percent or more of stress came from their work.² As a total group, the superintendents who perceived themselves as the most stressed were those whose school size had an average daily enrollment of 1,000 to 2,999.³

Thomas studied the perceptions of Tennessee public school superintendents regarding the nature of job-related stress.⁴ The study attempted to ascertain if there was a difference between the perceptions of job stress for popularly elected superintendents and appointed superintendents. In 1983, responding to a modified ASI, Tennessee superintendents ranked the ten most stressful individual items as follows:

1. Trying to secure financial support for the school system
2. Preparing and allocating budget resources

¹Myers, p. 68.

²Ibid., p. 62.

³Ibid., p. 92.

⁴Roy Earl Thomas, "Stress in School Administration: Perceptions of Tennessee Public School Superintendents," Diss. George Peabody College for Teachers of Vanderbilt Univ., 1984, p. 4.

3. Complying with state, federal, and organizational rules and policies
4. Working to ensure that the instructional program is being improved to meet the needs of the students
5. Having to make decisions that affect the lives of individual people that I know (colleagues, staff members, students, etc.)
6. Being interrupted frequently by telephone calls
7. Trying to gain and maintain public approval for school programs
8. Handling problems relative to pupil bus transportation
9. Feeling I have to participate in school activities outside of the normal working hours at the expense of my personal time
10. Imposing excessively high expectations on myself¹

Thomas concluded that there is no significant difference in perceived total stress between elected and appointed superintendents.² However, elected superintendents perceived more stress for situations relative to financial decision-making and political support than appointed superintendents.³

Personal Stress Management

Individuals must learn to cope more effectively with stress. Coping with stress requires initiative, responsibility, work, and commitment.⁴ The term "coping" refers to strategies for dealing with threat. Lazarus stated:

¹Thomas, p. 68.

²Ibid., p. 105.

³Ibid.

⁴Greenberg, p. 164.

when the individual discovers some important motive or value is being threatened, coping activity is mobilized by virtue of this threat, by virtue of the cognition that "my life, health, wealth, or cherished social relationships are in danger."¹

Learning to cope is a personal process based upon the individual's perception of various stressors.² Although most stress management training emphasizes one coping technique, there are many techniques to reduce the negative effects of stress.³ The same technique will not always be effective for an individual in various situations so it is important for the individual to experiment with alternative coping techniques.⁴ Selye pointed out that despite everything that has been written and said about stress and coping behaviors, "there is no ready-made success formula which would suit everybody."⁵

Lazarus has divided strategies for coping with stress into the two varieties of problem-solving and emotion-focused. Applied to job stress, problem-solving coping refers to personal efforts to change the sources of stress or an attempt to deal with job stress by altering troubling

¹Richard S. Lazarus, Psychological Stress and the Coping Process (New York: McGraw-Hill, 1966), p. 153.

²Cedoline, p. 108.

³Ibid., p. 164.

⁴Boyd Swent, "How Administrators Cope with Stress," Theory Into Practice, 22 (Winter 1983), 70.

⁵Selye, The Stress of Life, p. 454.

relationships in the environment. Emotion-focused techniques are directed at tolerating, reducing, or eliminating the negative consequences of job stress after they have been aroused.¹

Approaches to stress management may also be characterized by organizational methods and individual methods.² Newman and Beehr described organizational strategy for stress coping as actions implemented by the management intended to eliminate or change stress-producing factors in the job context or intended to beneficially modify the employee's reaction to job stress.

Organizational strategies are methods implemented by the organization for the primary benefit of the organization.³ Individual coping methods include actions and activities engaged in by an individual which may or may not take place within the organization.⁴

Individuals, especially school administrators, wanting to establish a personal stress management program to cope with the dysfunctional consequences of job stress should consider various factors. Three factors might be: personal stress management programs presented in selected literature;

¹Goleman, p. 57.

²Ivancevich and Matteson, p. 208.

³Newman and Beehr, p. 20.

⁴Ivancevich and Matteson, p. 208.

certain coping techniques, such as social support systems, exercise, diet, and relaxation techniques; and coping techniques used most frequently by school administrators.

Personal Stress Management Programs

Several authors have suggested guidelines for stress management programs. The stress management program suggested by Sparks and Hammond included adequate exercise, balanced diet, proper amount of sleep according to the needs of the individual, relaxation using effective techniques, improve interpersonal relationships, management of conflict and time, and development of a social support system.¹

Stress awareness and recognition is often cited as the first step of coping with stress. Swent and Gmelch stated:

A necessary precursor to managing stress is first recognizing the need to do something about it. Administrators must perceive that a problem exists before they can approach its resolution. Half of the strategy, therefore, is admitting that a potential problem exists and identifying the stress agents. Having done this through self-assessment, checking with colleagues and/or monitoring bodily cues (headaches, stiff neck muscles, etc.), administrators can begin to combat stress.²

Being aware of a stressor can often reduce the stress.

In a discussion of work and stress, Pelletier listed certain basic steps which are common to all successful

¹Sparks and Hammond, pp. 20-35.

²Swent and Gmelch, p. 31.

stress management programs.¹

1. Recognition--learn to recognize and anticipate both internal and external sources and situations of stress.
2. Hardiness--develop an attitude of "hardiness" consisting of commitment, acceptance of challenge, and a sense that the sources of stress can be controlled.
3. Practice--engage in the systematic practice of any stress management technique which works for you: clinical biofeedback, Autogenic Training, Herbert Benson's "relaxation response," meditation, Edmund Jacobson's Progressive Relaxation, yoga, Charles Stroebe's "quieting response."...
4. Generalize--become engaged in or continue a lifestyle involving moderate aerobic physical activity, a diet consistent with the U.S. Government Dietary Guidelines of the McGovern Committee..., a serious involvement in career, and an equally involved and fulfilled personal and family life....
5. Action plan and audit--develop a realistic plan of action and a self-audit based upon your desired end point....the goal may be to lose a specified amount of weight in a given time, to counteract a workaholic addiction, or even finish a work project...
6. Extension--develop the means to create relationships and environments which are supportive of these practices.¹

In his book Teacher Burnout, Truch presented a personal stress management program applicable to educators.² The

¹Kenneth R. Pelletier, Healthy People in Unhealthy Places (New York: Delacorte Press/Seymour Lawrence, 1984), p. 81.

²Ibid., pp. 81-82.

³Truch, p. 57.

R.E.A.D. program involves deep relaxation, regular exercise, attitude and awareness, and diet.¹ Truch discussed deep relaxation in terms of outside in and inside out. When a stress coping technique uses a physiological method for producing relaxation, Truch considered it an outside in technique. Some outside in techniques are: progressive relaxation, diaphragmatic breathing, and biofeedback. An inside out technique is when an individual uses some method of focusing inward. Various meditation techniques such as Transcendental Meditation, autogenic training, and visualization are inside out techniques.² Truch emphasized that "each technique has some place in the overall structure of things....No one technique is the answer to all problems."³

The second component of the R.E.A.D. program is exercise. Exercise should be aerobic in nature, done regularly, and should involve ten to thirty minutes per session.⁴ Truch pointed out that the main effect of a regular exercise program is the protection against heart disease and hypertension.⁵

The third ingredient of Truch's R.E.A.D. personal stress management program is attitude and awareness.

¹Truch, p. 58.

²Ibid., pp. 58-59.

³Ibid., p. 59.

⁴Ibid., p. 64.

⁵Ibid., p. 65.

Attitudes are important in stress management in terms of how an individual reacts to stressors. Awareness of what stressors in the environment are most bothersome and an awareness of bodily reactions to stress will be of benefit in the coping process.¹

Diet is the final component of the R.E.A.D. program. Truch listed the following dietary guidelines: eat moderately from all major food groups, avoid foods with artificial additives, flavorings, and colorings, avoid excessive amounts of liquor and caffeine, avoid faddish and quick weight loss diets, avoid smoking, avoid too much saturated fat, processed sugar, cholesterol, and salt, and reduce the frequency of eating out.²

Coping with stress may involve negative or positive coping strategies related to an individual's emotional, physical, and mental well being. Glasser described a positive addiction as anything a person chooses to do as long as it fulfills the following six criteria:

- (1) It is something noncompetitive that you choose to do and you can devote an hour (approximately) a day to it.
- (2) It is possible for you to do it easily and it doesn't take a great deal of mental effort to do it well.
- (3) You can do it alone or rarely with others but it does not depend upon others to do it.
- (4) You believe that it has some value (physical, mental, or spiritual) for you.
- (5) You believe that if you persist at it you will improve, but this is completely

¹Truch, p. 65.

²Ibid., pp. 69-70.

subjective--you need to be the only one who measures that improvement.

- (6) The activity must have the quality that you can do it without criticizing yourself. If you can't accept yourself during this time the activity will not be addicting.¹

Glasser believed that running is the hardest but surest way to achieve a positive addiction state.² Meditation is considered the most popular way.³

Personal Stress Management Techniques

Numerous stress coping techniques are presented in the literature. Some techniques require an individual to receive formal training in order to use the technique successfully. Other techniques are basic and simple to learn yet effective in coping with stress. Four of the most popular coping techniques are social support system, exercise, diet, and relaxation.

Social support system. Social support is an invaluable personal occupational stress management technique. Social support

has been identified as the single most effective means of preventing or ameliorating the effects of occupational stress. Research literature is replete with citations identifying social support as the number one antidote for distress.⁴

¹William Glasser, Positive Addiction (Evanston, IL: Harper & Row, 1976), p. 93.

²Ibid., pp. 122-23.

³Ibid., p. 129.

⁴Cedoline, p. 115.

The quantity and quality of an individual's social support relationship with spouse, friends, co-workers, and supervisors appear to have effects on the amount of stress experienced and affect an individual's overall well-being.¹ When an individual enjoyed high levels of social support, research indicated that perceived stressors have little or no relationship to ill health. On the contrary, when social support was low, symptoms of physical and psychological illnesses often appeared.² Cedoline cited several studies which suggested that supportive social relationships with superiors, colleagues, and subordinates at work directly reduced the level of occupational stress.³

Functions of a social support system depend on the situation confronting the individual. Social support focuses on the individual helping him or her contribute to the organization or when experiencing conflict with an organization.⁴ Seashore listed four purposes of a social support system depending on the situation: re-establishing competence, maintaining high performance, gaining new

¹McLean, p. 152.

²Matteson and Ivancevich, pp. 75-76.

³Cedoline, p. 115.

⁴Charles Seashore, "Developing and Using a Personal Support System," in Understanding and Managing Stress: A Book of Readings, ed. John D. Adams (San Diego: University Associates, 1980), p. 158.

competencies, and achieving specific objectives.¹ During times of intense stress or transitions, when an individual may be functioning at a low level of competence, a good support system can help re-establish competence. When a person is performing at a high level, access to a social support system is important to maintain the level of activity. Developing new skills or dealing with new situations requires the support of people who can serve as models and provide emotional support. To achieve specific objectives, an individual must at times use a number of persons for resources and contributions.²

A support system consists of a number of individuals who may function in various roles or one specific role.³ Miller explained three roles. Persons to whom the individual can turn to and be fully accepted serve in the role of comforter. Functioning as clarifiers are persons who will probe issues and help explore and define problems. Persons functioning as confronters will cause the individual to focus on difficult or obscure issues.⁴ Different functions of support system members, as listed by Seashore, are role models, common interests, close friends,

¹Seashore, p. 157.

²Ibid., pp. 157-58.

³Ibid., p. 157.

⁴William C. Miller, Dealing with Stress: A Challenge for Educators (ERIC ED 178 522), p. 28.

helpers, respect competence, referral agents, and challengers.¹

In order that a support system be successful, certain principles should be followed. The relationships should be as simple as possible, current, and fairly arranged. The optimum number is three to eight participants. Feedback is important so that each individual is aware of the value of the relationship. If support members are unavailable, alternates should be available.²

Exercise. An abundance of evidence supported the positive relationship between exercise and stress reduction. During the past twenty years, the benefits of exercise have been promoted on television, in magazines, books, schools, and the work place. Physical fitness has become a major business, yet approximately 80 percent of the population is not exercising enough.³ Exercise is anything an individual does that causes him or her to breathe heavily more than three to five minutes, arouses the whole body, requires use of muscles vigorously, and makes the heart pump more rapidly.⁴ Exercise activities can be classified into four categories: sports and recreational activities,

¹Seashore, pp. 158-59.

²Ibid., p. 159.

²Edward A. Charlesworth and Ronald G. Nathan, Stress Management: A Comprehensive Guide to Wellness (New York: Atheneum, 1985), p. 262.

³Albrecht, p. 223.

aerobic or cardiovascular, muscular fitness and strength, and tension-relieving exercises.¹ Exercise activities should bring about the three fitness components of cardiorespiratory endurance, flexibility, and muscular function. Charlesworth and Nathan referred to these as the three S's: stamina, suppleness, and strength.²

Several factors should be taken into account before selecting an exercise program. A physical examination is recommended. A successful exercise program should be personal, meaning that it should be pleasing and manageable to the individual. An individual should be committed to a regular exercise program.³

Exercise provides a means of releasing muscle tension and general physical arousal resulting from the body's response to stress. Regular exercise has been associated with the physiological and psychological benefits of a greater ability to concentrate, a reduced risk of heart attack, more energy, a firmer appearance, reduced anxiety and hostility, elevated mood, improved immune response, better sleep, and better control of body weight.⁴ Matteson and Ivancevich cited the following results of various

¹Leon J. Warshaw, Managing Stress (Menlo Park, CA: Addison-Wesley, 1979), pp. 161-64.

²Charlesworth and Nathan, p. 262.

³Greenberg, p. 129.

⁴Charlesworth and Nathan, pp. 259-60.

studies of what an individual might expect from exercise in the area of stress management:

Research conducted at the Physical Fitness Research Laboratory consistently has found that exercisers reported a lessening or complete disappearance of "nervous tension."

Numerous independent studies have found significant lowering of anxiety among regular exercisers.

Several well-controlled studies demonstrate increasing levels of emotional stability as well as a reduction in mood changes among people undertaking an exercise program.

Numerous studies show reductions in a host of stress emotions after individuals undertook regular exercise. These included lower anxiety, depression, and hostility.

Many exercisers reported not only a diminishing of negative emotions but an enhancement of positive ones including joy and states of near euphoria.¹

Many educators do not exercise. Greenberg found that the two excuses educators used for their failure to exercise were lack of time and fatigue. Some exercise programs can be designed to require only a few minutes a day. Walking offers many benefits with minimal risk or preparation making it an excellent exercise for busy educators. Regular exercise is a proven means for combating fatigue.²

Diet. As with exercise, there is a direct relationship between stress management and nutrition. To some degree, diet determines how an individual will respond and recover

¹Matteson and Ivancevich, p. 209.

²Greenberg, pp. 121-27.

from stress. The metabolism rate is always increased as part of the G.A.S. resulting in a nutritional needs increase.¹ Proper diet will help prepare an individual to cope with stress.² Yet the average American is a nutritional illiterate.³ Yates asked a group of professional people to name the four basic food groups and not one individual responded correctly.⁴ According to John D. Adams, most managers have little awareness of good nutritional principles.⁵ Not only what but how an individual eats may compound or reduce the negative effects of stress.⁶

Karl Albrecht described diet as "the sum total of the substances..." an individual introduces into the body.⁷ A good diet consists of a balanced combination of foods that supply the basic ingredients of nutrition, moderate quantities of food, vitamin supplements taken in moderation, minimal use of "junk" food, little or no alcohol, no tobacco, no hard drugs, rare or no use of patent medicines,

¹Greenwood and Greenwood, p. 194.

²Ibid., p. 196.

³Yates, p. 140.

⁴Ibid., p. 139.

⁵John D. Adams, ed., Understanding and Managing Stress: A Book of Readings (San Diego: University Associates, 1980), p. 172.

⁶Greenberg, p. 103.

⁷Albrecht, p. 223.

and no use or moderate use of caffeine.¹

Eliot and Breo suggested guidelines for eating right. The guidelines included maintaining a healthy weight; eating a variety of foods; eating regular meals including breakfast; avoiding too much fat, saturated fat, and cholesterol; eating foods with adequate starch and fiber; avoiding too much salt or sodium; avoiding sugar; and not abusing the use of vitamins.²

The affluent diet, as described by Eckholm and Record, is prevalent in North America and is characterized by a high intake of animal fats and cholesterol, substituting refined flour and sugar for bulky carbohydrates, and selecting commercially manufactured foods instead of fresh products.³ As the affluent diet has flourished so have coronary heart disease, diabetes, diverticulosis, and bowel cancer.⁴

How an individual eats is important. Avoid eating too fast and gulping food. Eat in a relaxed atmosphere and chew food well. Avoid irregular eating habits or eating while

¹Albrecht, pp. 223-24.

²Robert S. Eliot and Dennis L. Breo, Is it Worth Dying For? (New York: Bantam Books, 1984), pp. 162-81.

³Erik Eckholm and Frank Record, "The Affluent Diet: A Worldwide Health Hazard," in Understanding and Managing Stress: A Book of Readings, ed. John D. Adams (San Diego: University Associates, 1980), pp. 123-24.

⁴Ibid., p. 126.

doing other activities. Eat only when hungry.¹

According to Greenberg, the nutritional habits of many educators are poor. Few educators eat a well-balanced diet. Teachers and administrators "often follow a pattern of eating fast food and food fast."²

Relaxation. As a stress management technique, relaxation fights the harmful effects of stress. Relaxation affects a person's well-being medically, physically, and emotionally.³ From several relaxation techniques that have been proven to be effective, the following approaches represent the most popular: meditation using Transcendental Meditation and Benson's Relaxation Response, biofeedback, and Edmund Jacobson's Progressive Relaxation.

As a relaxation coping technique, meditation may help an individual at both the psychological and physiological level.⁴ Pelletier, from observations and clinical experience, believed that psychophysiological changes resulting from the use of meditation are a positive antidote for preventing or alleviating prolonged stress reactivity.⁵

¹Cedoline, p. 159.

²Greenberg, p. 112.

³Ibid., p. 139.

⁴Amarjit Singh Sethi and Randall S. Schuler, Handbook of Organizational Stress Coping Strategies (Cambridge, MA: Ballinger, 1984), p. 146.

⁵Kenneth R. Pelletier, Mind as Healer, Mind as Slayer (New York: Delta, 1977), pp. 191-92.

Changes which occur during meditation are a slowing of breath and heart rate, decrease in oxygen consumption, lowering or stabilization of blood pressure, and decrease in skin conductivity.¹ These changes are opposite of W. B. Cannon's fight-or-flight response.²

Sethi and Schuler defined meditation as a noncalculating mood indicating an altered state of consciousness that is free of anxiety, tension, or distress which may occur spontaneously or with the aid of a technique.³ There are many forms of meditation but there are two basic methods by which the psychological state termed transcendental awareness is achieved. One method is the restriction or focusing of attention on an object of meditation. The other method is an opening up of attention, in which the meditator places himself in a state of undistracted receptivity to external and internal stimuli.⁴ Concentration is essential in all methods of meditation. The fundamental process of meditation is to gain "mastery over attention."⁵

Pelletier cited several studies using meditation as an

¹Pelletier, Mind as Healer, Mind as Slayer, p. 192.

²Ibid., pp. 191-92.

³Sethi and Schuler, p. 145.

⁴Pelletier, Mind as Healer, Mind as Slayer, pp. 192-93.

⁵Ibid., p. 193.

adaptive response to stress, such as Goleman's study.¹ Goleman designed a study at Harvard University to see how the practice of meditation helps an individual cope with stress.² The study indicated that meditators handle stress in a way that breaks up the "threat-arousal-threat spiral."³ Meditators relaxed after a challenge passed more often than nonmeditators; perceived threat more accurately; and once aroused meditators recovered more rapidly. Goleman concluded that the biggest appeal of meditation is the promise of becoming more relaxed more of the time.⁴

Sethi discussed several techniques of meditation which are practical and can be used as coping techniques for stress management in modern society. The techniques discussed were Transcendental Meditation (TM), Clinically Standardized Meditation (CSM), Benson's Relaxation Response, Zen Meditation, Sikh Meditation or Nam Simran, and Diagnostic Meditation (DM).⁵ Of these techniques of meditation, TM and Benson's Relaxation Response are popular in the Western world and often discussed at length in literature.

A popular type of meditation is Transcendental

¹Pelletier, Mind as Healer, Mind as Slayer, pp. 197-208.

²Adams, p. 150.

³Ibid., p. 151.

⁴Ibid.

⁵Sethi and Schuler, pp. 152-59.

Meditation (TM) which has been practiced for centuries in India and was brought to the Western world in 1959 by the Indian teacher Maharishi Mahesh Yogi.¹ Glasser, in his book Positive Addiction, mentioned that he thinks of the Maharishi as the Henry Ford of meditation because the Maharishi has taken TM, which has not been widely used for thousands of years, and made it a valuable part of the daily life of over half a million people.²

Transcendental Meditation is a specific and unique practice, since it is neither a religion or a philosophy nor does it involve autosuggestion or physical manipulation. TM is a natural technique for reducing stress and expanding conscious awareness.³ Harold H. Bloomfield cited numerous studies which proved that the negative physiological and psychological effects of stress could be reduced through TM.⁴ According to Bloomfield, more than any other relaxation technique, TM can provide more profound and natural rest which has been considered the most powerful agent to reduce stress.⁵

TM is considered a simple, easy-to-learn mantra

¹Harold H. Bloomfield, Peter Cain, and Dennis T. Jaffe, TM: Discovering Inner Energy and Overcoming Stress (New York: Delacorte Press, 1975), pp. 31-35.

²Glasser, p. 124.

³Bloomfield, Cain, and Jaffe, pp. 10-11.

⁴Ibid., pp. 63-114.

⁵Ibid., p. 57.

meditation.¹ TM involves the repetition of a mantra for fifteen to twenty minutes each day while the meditator sits in a comfortable position with eyes closed. The mantra should be a short word or sound which does not cause the meditator to make any associations based on the word or sound. The purpose of the mantra is to absorb the meditator's attention so as to still the mind.²

The Relaxation Response as presented by Herbert Benson can "act as a built-in method of counteracting the stresses of everyday living which bring forth the fight-or-flight response."³ The Relaxation Response has always existed in the context of religious teachings. In the Eastern cultures, the Relaxation Response has been an essential part of daily existence. Only recently has its physiology been defined.⁴ Research has proven that the Relaxation Response decreases physiological measurements associated with stress. The Relaxation Response causes decreases in oxygen consumption, respiratory rate, heart rate, blood pressure, and muscle tension.⁵

Anyone can evoke the Relaxation Response if time is set

¹Glasser, p. 125.

²Pelletier, Mind as Healer, Mind as Slayer, pp. 213-14.

³Herbert Benson, The Relaxation Response (New York: William Morrow, 1975), pp. 111.

⁴Ibid., p. 19.

⁵Ibid., pp. 70-71.

aside and a conscious effort is made.¹ Four basic components are necessary to bring forth the Relaxation Response: (1) a quiet environment, (2) an object to dwell upon, (3) a passive attitude, and (4) a comfortable position.² A quiet environment which may be a quiet room, place of worship, or an outdoor area is necessary in order to avoid external distractions. An object to dwell upon when distracting thoughts occur may be a word or sound repetition, gazing at a symbol, or concentrating on a particular feeling. The most essential factor in eliciting the Relaxation Response is a passive attitude. A passive attitude clears all thoughts and distractions from the mind. A comfortable position, such as sitting, will allow an individual to remain in the same position for at least twenty minutes.³ Practicing these four elements for ten to twenty minutes once or twice daily should be an effective stress coping technique.⁴

Biofeedback is the process that allows an individual to gain voluntary control over the physiological processes by the use of monitoring instruments to record and display

¹Benson, p. 125.

²Ibid., pp. 78-79.

³Ibid.

⁴Ibid., p. 19.

information concerning physiological processes.¹ The concept of the voluntary regulation of the autonomic nervous system was considered impossible prior to the last decade.² Through research by Dr. Neil E. Miller, the control of involuntary bodily processes was shown to be possible through biofeedback.³ Wentworth-Rohr defined biofeedback by its operations, targets, and goals.⁴ According to Wentworth-Rohr, "operations consist of the application of the instruments, the targets are the physiological systems, and the goals are desired changes in one or more attributes of those systems."⁵

Biofeedback involves the use of instruments which sense, by electrodes or transducers, signals of physiologic information about body functions involved in the body's responses to stressors such as breathing, heart rate, blood pressure, muscle tension, or brain waves.⁶ With this

¹H. R. Beech, L. E. Burns, and B. F. Sheffield, A Behavioral Approach to the Management of Stress: A Practical Guide to Techniques (New York: John Wiley, 1982), p. 97.

²Pelletier, Mind as Healer, Mind as Slayer, p. 264.

³Sethi and Schuler, p. 185.

⁴Ivan Wentworth-Rohr, Symptom Reduction Through Clinical Biofeedback (New York: Human Sciences Press, 1984), p. 45.

⁵Ibid.

⁶Barbara B. Brown, Stress and the Art of Biofeedback (New York: Harper and Row, 1977), p. 3.

physiological information, individuals can learn to consciously control many autonomic or involuntary nervous system functions.¹

During the biofeedback learning process, the patient must first recognize the link between mind and body. For example, during the initial stages of electrocardiogram (ECG) or heart-rate feedback, when a patient thinks pleasant thoughts, his or her heart begins to decelerate. When the patient thinks about unpleasant or stress-inducing situations, the heart rate accelerates. The patient then begins to realize the physical sensations when the heart rate decelerates or accelerates and may duplicate the sensations. Once the link between internal sensations and their effects upon the body functions are established, the individual has a means of regulating the autonomic functions. With practice and training, the individual will no longer need the biofeedback equipment except for check-ups.²

Beech, Burns, and Sheffield pointed out three purposes for which biofeedback training might be appropriate in relationship to stress. The first would be the use of biofeedback as a means of enhancing relaxation training. The second use might be biofeedback training of a particular

¹Pelletier, Mind as Healer, Mind as Slayer, p. 265.

²Ibid., pp. 265-66.

parameter in an individual's response to stress. A third use would be as a therapeutic approach to a stress-related disorder.¹

The two principal biofeedback procedures which focus on stress reduction are muscle (EMG) biofeedback and alpha biofeedback.² Muscle (EMG) biofeedback assists in learning muscle relaxation and temperature biofeedback produces a more internal relaxation effect. EMG biofeedback is supplemented by Jacobson's Progressive Relaxation and by autogenic training. As a stress-reduction measure, particularly for emotional stress, some researchers feel that alpha biofeedback is appropriate.³

Pelletier cited various studies indicating that biofeedback has been used to induce a specific relaxation response in the treatment of many disorders resulting from the classic fight-or-flight stress reaction.⁴ According to Pelletier,

one major advantage of biofeedback is that specific physiological function which needs to be corrected can be monitored, feeding information back to the patient to help him assess his progress in alleviating that dysfunction. This instantaneous feedback is a major asset in stress-reduction therapy.⁵

¹Beech, Burns, and Sheffield, p. 101.

²Brown, Stress and the Art of Biofeedback, p. 187.

³Ibid.

⁴Pelletier, Mind as Healer, Mind as Slayer, pp. 278-90.

⁵Ibid., p. 269.

Referred to as a method of "internal biofeedback" by one author, progressive muscle relaxation was developed by Edmund Jacobson.¹ The common muscle-tension complaints of eyestrain, back pain, stiff legs, neck stiffness, hoarse voice, gas pains, and chest pains can be relieved with regular use of progressive muscle relaxation.² According to Jacobson, it is physically impossible to be nervous in any part of the body if an individual is completely relaxed.³ If muscles that have accumulated emotional tension relax, then the mind will relax.⁴

In 1929, Jacobson wrote Progressive Relaxation which described the use of deep muscle relaxation and addressed doctors and scientists.⁵ Addressing laymen, You Must Relax was published in 1934.⁶ In these books, Jacobson explained the method to relax the muscles of the body. He coined the term "progressive relaxation." The relaxation was "progressive" in three respects: an individual relaxes a group of muscles further and further each minute, an

¹Robert L. Woolfolk and Paul M. Lehrer, eds., Principles and Practice of Stress Management (New York: Guilford Press, 1984), p. 14.

²Martin Shaffer, Life After Stress (New York: Plenum Press, 1982), p. 70.

³Edmund Jacobson, You Must Relax, 5th ed. (New York: McGraw-Hill, 1978), p. 150.

⁴*Ibid.*, pp. 249-51.

⁵*Ibid.*, p. 4.

⁶*Ibid.*, p. vii.

individual learns one after the other to relax principal muscle groups, and an individual progresses toward a habit of repose with practice from day to day.¹

The progressive relaxation process is divided into the two major approaches of lying and sitting. For each of the major approaches there are arm, leg, trunk, neck, eye region, visualization, and speech region practice.² The training length to achieve the relaxation response in all muscle groups is lengthy.³

Personal Stress Management Techniques Used by School Administrators

Stress management. Programs and stress management techniques as discussed in the literature present valuable background information for individuals in regard to coping with stress. Research on stress of school administrators indicated popular coping techniques used in daily life.

In Swent's study of 1,245 Oregon school administrators, more than 75 percent of them responded to a question asking what ways they had personally found useful in handling the tensions and pressures of their job.⁴ Reported activities used to reduce stress were divided into the three major

¹Jacobson, p. 161.

²Greenwood and Greenwood, p. 186.

³Woolfolk and Lehrer, p. 43.

⁴Swent, "How Administrators Cope with Stress," p. 70.

categories or physiological, cognitive and psychological, and interpersonal and organizational management activities.¹ Physiological activities included physical exercise or work, activities practiced specifically for the purpose of relaxation such as meditation, and the use of alcohol or drugs. The cognitive and psychological area included activities that could be characterized as a philosophy of living or be utilized to cope in a positive manner. Examples of activities considered in the cognitive and psychological area were sense of humor, religious beliefs, efforts to separate the home environment from the work environment, and attempts to separate the individuals physically or psychologically from work. Activities relating to the utilization of skills which increase an individual's effectiveness on the job such as time management, conflict resolution, team management, and communication skills were categorized as interpersonal and organizational management activities.²

Approximately two out of every three school administrators indicated the use of physiological activities as the most used means of stress management.³ Over 22 percent of the administrators used cognitive activities and 12 percent responded as using interpersonal and organizational

¹Swent, "How Administrators Cope with Stress," pp. 70-71.

²Ibid., p. 71.

³Ibid., p. 72.

management skills.¹ Among superintendents reporting, almost 65 percent of them used physiological activities, approximately 25 percent used cognitive activities, and 9.6 percent used interpersonal/organizational activities as coping techniques.²

Results similar to those in Swent's study were found by Cook in the study of Wyoming school administrators. Approximately 85 percent of the participating superintendents identified at least one method which they used in dealing with stress.³ Coping techniques that were categorized as physiological activities received the greatest number of responses. Respondents representing the various administrative positions indicated "participating in exercise and athletic events" as the most popular activity.⁴ Cognitive activities received the second highest response with "leaving school problems at school" as the most popular cognitive method.⁵ "Attendance at workshops with other educators for renewal and encouragement" was the first ranking technique in the least used category which was the acquisition of interpersonal and management skills.⁶

Tennessee school administrators were asked by Brimm to

¹Swent, "How Administrators Cope with Stress," p. 72.

²Ibid.

³Cook, p. 94.

⁴Ibid., pp. 95-96.

⁵Ibid., p. 98.

⁶Ibid., p. 97.

identify specific techniques or strategies that they used to cope with occupational stress.¹ Approximately 89 percent of the administrators responded to this question.² Using Swent's categorical scheme, Brimm placed the coping techniques reported under one of the three headings: physiological, cognitive, and acquisition of interpersonal and management skills.³ The majority of respondents listed physiological type activities as preferred coping techniques. Physiological type activities, such as jogging, racquetball, tennis, golf, and walking were listed by more than 22 percent of the respondents. Approximately 35 percent indicated that hobbies, manual labor, farming, camping, and vacations were strategies used to cope with stress.⁴ The least mentioned coping strategies were those dealing with the acquisition of interpersonal and management skills.⁵ Brimm concluded that administrators might consider the following implications regarding the development of successful methods of coping: pursue time management training, develop a more positive approach to rules and regulations, develop and strengthen human relation skills, understand job expectations, identify performance criteria, and schedule time during the day to relax and reflect.⁶

¹Brimm, p. 6.

²Ibid.

³Ibid.

⁴Ibid.

⁵Ibid., p. 7.

⁶Ibid., pp. 9-11.

In a study of Texas superintendents, Myers found that 88 percent of the participants involved in the study mentioned at least one coping strategy which they used regularly to combat personal stress.¹ The coping behaviors were categorized according to physiological activities and cognitive activities. Physiological activities for coping with stress were used the most frequently. The three most frequent physiological activities mentioned in rank order were: (1) participating in exercise and athletic events such as walking, jogging, golf, etc.; (2) being involved in hobbies such as gardening, fishing, working on cars, carpentry, etc.; and (3) leaving town to get totally away from the employment environment.² Leaving problems at school rather than taking them home and religious beliefs or prayer were the most frequently mentioned in the cognitive activities group.³

In the Saville and Kavina study, almost 70 percent of the responding superintendents in thirteen western states indicated that they had informal, individual methods of coping with stress rather than formal, prescribed plans.⁴ Exercise programs, prayer or meditation, outdoor recreation, and specific sport activities were the most frequently

¹Myers, p. 63.

²Ibid., pp. 63-65.

³Ibid., p. 65.

⁴Saville and Kavina, p. 19.

reported activities for coping with stress.¹

Gall asked North and South Dakota superintendents the question, "Do you have a personal plan for coping with distress?"² Of the respondents, 67 percent reported having some type of individual, but not formally prescribed, plan for coping with distress.³ The most frequently reported activities, by rank, were: outdoor recreation, exercise program, and prayer.⁴ Only 5.1 percent reported having a formal stress management program for their staff.⁵

Summary

Man has experienced the stress response since his beginning. The stress concept has been of interest throughout the centuries with such men as Hippocrates, Claude Bernard, and Walter Cannon developing theories concerning the concept of stress. During the past half century, Hans Selye has become the leading authority on stress. Selye has defined stress and emphasized that stress may be pleasant stress known as eustress or unpleasant stress known as distress. Selye explained the stress response in terms of the General Adaptation Syndrome and concluded that a relationship exists between the body's response to stress and numerous diseases. Researching the

¹Saville and Kavina, p. 19.

²Gall, p. 64.

³Ibid.

⁴Ibid., p. 65.

⁵Ibid.

correlation between changes in a person's life and the onset of illness, Holmes and Rahe developed the Social Readjustment Rating Scale.

Occupational stress, especially in the helping professions, is the most common cause of stress for contemporary man. The Person-Environment Fit theory explores the goodness of fit between the environment and the person. An occupational stress model developed by Cooper and Marshall presents a classification of sources of occupational stress and how the stressors interacting with the characteristics of the individual may cause symptoms of excessive stress and eventually stress-related diseases. According to Cooper and Marshall, sources of stress at work are classified as intrinsic to the job, role in the organization, career development, relationships at work, and organizational structure and climate. Characteristics of the individual include the level of anxiety, level of neuroticism, tolerance for ambiguity, and type A behavioral pattern. Prevalent occupational stressors are role ambiguity, role conflict, role overload, and responsibility.

An occupation in which work-related stress has been a current major concern is in the field of education. Due to stress, many educators are seeking employment in areas outside the field of education. Sources of stress for teachers which are most often cited in surveys are: role ambiguity and conflict, lack of budget and fiscal support,

disruptive students, excessive paperwork, and little participation in the decision-making process. School administrators, like teachers, are seeking employment outside the field of education. Administrators often indicated the following as occupational stressors: Complying with state, federal, and organizational rules and policies, attending time-consuming meetings, completing reports and other paper work on time, gaining public approval, and securing financial support for school programs.

Unlike early man, an individual confronted with occupational stress finds it inappropriate to react to stress with the classical fight-or-flight response. An individual's stress-coping techniques are vital for dealing with stress and in avoiding the dysfunctional consequences of stress. Several authors have presented stress-coping programs. The most frequently mentioned stress-coping techniques in many programs include social support system, exercise, diet, and relaxation techniques. A social support system emphasizes the importance of quality relationships with employers, co-workers, friends, and family who serve in various functions in the support system. Adequate exercise and diet have received much attention during the past decade as means of becoming physically fit. According to research, getting enough exercise and a nutritionally balanced diet are important in the way an individual copes with stress.

Numerous relaxation techniques exist which allow individuals to effectively cope with the dysfunctional effects of stress. Popular in the Western world are meditation using TM and Benson's Relaxation Response, biofeedback, and Jacobson's Progressive Muscle Relaxation. Research on the stress coping techniques of public school administrators concluded that the techniques used by administrators may be categorized in three areas: physiological, cognitive and psychological, and in interpersonal and organizational management activities.

CHAPTER THREE

Methodology

This study focused on occupational stress as perceived by Iowa public school superintendents. Superintendents were asked to indicate the frequency and intensity of occupational sources of stress. The study was designed to determine the relationship between perceived occupational sources of stress and demographic variables. Superintendents were requested to list stress management techniques that they used.

In the first of the four sections of this chapter, the sample and population are described. The next section describes the original and modified survey instruments. The third section explains the data collection procedures. The final section discusses the statistical methods to be used to analyze the data.

Sample and Population

According to the Iowa Department of Public Instruction, there are 436 school districts in Iowa. The school districts were categorized in four groups by K-12 enrollment: (1) 0-499, (2) 500-749, (3) 750-1,499, and (4) 1,500 and larger. The enrollment categories were selected

on the basis of information obtained from the Department of Public Instruction regarding previous studies utilizing K-12 enrollment in Iowa.¹ Forty superintendents from each of the four enrollment categories were selected to participate in the study by a computer-generated sample by the Department of Public Instruction. The sample size was 160 superintendents. Superintendents serving in school districts located in Area Education Agency 15 were excluded from participation in the final study since they were involved in the pilot testing of the modified ASI.

Instrumentation

Administrative Stress Index

The Administrative Stress Index (Appendix B) was developed by Swent for a study of the perceptions of Oregon school administrators on occupational sources of stress.² Upon request, Dr. Swent gave his permission to use the ASI in this study (Appendix C). The questionnaire is divided in two portions. The first portion of the questionnaire contains thirty-five items designed to access perceptions of administrators toward "those situations that were bothersome

¹Telephone interview with Leland Tack, Chief of Data Analysis and Statistics of the Department of Public Instruction, Des Moines, Iowa, June 18, 1985.

²Swent, "An Exploratory Study of the Perceptions of Oregon School Administrators on Occupational Sources of Stress," pp. 150-51.

in the performance of their job."¹ The style of the ASI is similar to the Job Related Stress Index (JRS) which is a fifteen-item index of job-related stress used by Indik, Seashore, and Slesinger.² Twelve items were refined from the JRS and twenty-three items were developed from stress logs and a review of current school administrative literature to create the thirty-five items on the ASI. The ASI permits a more comprehensive assessment of perceived job-related stress among school administrators than would a generic instrument.³

The items were stated in the form of questions capable of being responded to on a five-point Likert-type scale.

The key term in the items--"bothered by"--was chosen after a search for an expression representing a mild degree of annoyance or anxiety but was less value-laden than the word "stress." The term "stress" has a negative connotation to most people.⁴

The second portion of the ASI includes sixteen items

¹Swent, "An Exploratory Study of the Perceptions of Oregon School Administrators on Occupational Sources of Stress," pp. 22-23.

²Bernard Indik, Stanley E. Seashore, and Jonathan Slesinger, "Demographic Correlates of Psychological Strain," Journal of Abnormal and Social Psychology, 69 (July 1964), 26-38.

³James L. Koch et al., "Job Stress Among School Administrators: Factorial Dimensions and Differential Effects," Journal of Applied Psychology, 67 (Aug. 1982), 494.

⁴Swent, "An Exploratory Study of the Perceptions of Oregon School Administrators on Occupational Sources of Stress," p. 24.

designed to collect personal and situational information about the respondent. The items were identified as possible variables related to the stress that an administrator might experience. They included level of administrative position, age, sex, school size, district size, length of time in position, length of time in administration, hours worked per week, hours exercised per week and current health status.¹

The final items were open-ended questions that asked the administrator to identify methods useful in managing occupational stress. This information was collected to assist in further research on methods of managing stress by administrators.²

Modified Administrative Stress Index

The ASI was modified to meet the purposes of this study (Appendix D). The original ASI was designed to survey all levels of school administrators. Deletion and modification of some phrases used in the thirty-five stressors in Part A made the modified ASI more applicable to superintendents.

In Part B some demographic items were modified or eliminated to make the information pertinent to Iowa superintendents. Some demographic variables were added to the modified instrument. Information requested from the

¹Swent, "An Exploratory Study of the Perceptions of Oregon School Administrators on Occupational Sources of Stress," p. 25.

²Ibid.

superintendents was: (1) age, (2) role in addition to superintendency, (3) highest degree held, (4) size of district, (5) geographic location of the district by Area Education Agency number (Appendix E), (6) description of district as rural, urban, or suburban, (7) years in present position, (8) total years in administration, (9) hours worked per week, (10) hours of physical exercise per week, (11) self-reported current physical health, and (12) the percentage of total stress in life estimated to be a result of the superintendent's job.

Swent recommended for further research an additional scale that would ask respondents to identify the intensity of each stressor.¹ The modified ASI utilized two separate five-point Likert-type response categories. One response category was designated for respondents to identify the frequency of each stressor. A second scale was designated for respondents to identify the intensity of each stressor. Swent stated, "The intensity of the occasional stressor may have a more detrimental effect than the stressor that occurs frequently."²

The changes that were made to develop the modified ASI for this study were examined by Dr. Swent and Dr. Gmelch,

¹Swent, "An Exploratory Study of the Perceptions of Oregon School Administrators on Occupational Sources of Stress," p. 148.

²Ibid.

who designed the original ASI. Dr. Swent and Dr. Gmelch expressed their support of the study and approval (Appendix F) of the modifications of the original ASI. The modified questionnaire was critiqued in interviews with the following Drake University professors: Dr. Barry Steim, Dr. Mabry Miller, Dr. Paul Joslin, and Dr. Charles Rowley.

Although the original ASI has been used in other studies, the changes that were made to develop the modified ASI for this study required an examination of reliability. A cover letter (Appendix G), the modified questionnaire with a specific area for comments, and a self-addressed stamped envelope for returning the questionnaire were sent to twenty-four current school superintendents in Southern Prairie Area Education Agency 15.

In a period of one month after the mailing date, the returned questionnaires were reviewed to determine the need for clarification. Revisions and refinement were made in response to the suggestions. No major changes were required.

Data Collection

The cooperation of the Iowa Association of School Boards (IASB) and the Iowa Association of School Administrators (IASA) was sought in the study. Upon request, E. Kelly Schlapkohl, executive director of the IASA, provided an endorsement letter and Ted Davidson, executive director of the IASB, provided a letter of support

for the study (Appendix H). The letters were included with the questionnaire encouraging superintendents to participate in the study. The Department of Public Instruction made available addressograph plates for the random sampling of superintendents.

On October 14, 1985, a packet was mailed to 160 Iowa public school superintendents. The packet consisted of: (1) a cover letter (Appendix I) explaining the purpose of the study, requesting completion of the questionnaire, and assuring the respondent's anonymity in the study; (2) a modified ASI questionnaire; (3) letters of support from IASB and IASA; and (4) a stamped, self-addressed return envelope. Since complete anonymity was strictly observed, no follow-up effort was made.

Of the 160 questionnaires mailed, 144 questionnaires were returned, a 90 percent response. There are several possible explanations for the high percentage of response. The first related to the relevance and timeliness of the subject of stress of superintendents. Second, letters of support and endorsement were sent to superintendents from the Iowa Association of School Boards and the Iowa Association of School Administrators encouraging them to participate in the study. Additionally, the questionnaire was designed for clarity, simplicity and readability.

Analysis of Data

All items listed on the modified ASI were computer analyzed using appropriate programs from the Statistical Package for the Social Sciences (SPSS). Distributions and relationships between variables, as presented in tables were derived. The descriptive statistics generated were derived in the form of frequencies, means, standard deviations and standard errors of measurement.

To analyze the data collected for the six research questions and the twenty-three hypotheses, various statistical measures were utilized. The t-test was utilized to measure the differences between the mean frequency and the mean intensity of the thirty-five stressors. Analysis of variance was used to test for significant differences in stress among Iowa public school superintendents by frequency responses and intensity responses. Various demographic data were analyzed by frequency responses and intensity responses utilizing a one-way analysis of variance and a post hoc analysis using the Scheffe' procedure for multiple comparisons. The correlation coefficient was used to determine the degree of relationship between each stressor according to frequency and according to intensity. Squaring the correlation coefficient determined variance among the stressors in relationship to frequency and in relationship to intensity. This statistical measure was used to analyze relationships of stress categorical factors. The

significance in all statistical treatment was established at the .05 level.

Summary

This study of occupational stress as perceived by Iowa public school superintendents involved 144 superintendents. The survey instrument was the modified ASI which consisted of thirty-five stressors. The frequency of each stressor and the intensity of each stressor was indicated by the respondents on two separate five-point Likert-type scales. The second part of the modified ASI consisted of demographic items which provided pertinent information about Iowa public school superintendents. Statistical treatment of the data was done using the SPSS programs. In testing the hypotheses, the .05 statistical significance level was utilized.

CHAPTER FOUR

Presentation and Analysis of Data

The purpose of this study was to determine (1) the frequency and intensity of occupational sources of stress as perceived by Iowa public school superintendents, (2) the relationship between perceived occupational sources of stress and demographic variables, and (3) stress management techniques used by superintendents. Participants in the study were asked to assess thirty-five stressors on two separate five-point Likert-type response categories. One response category was designated for respondents to identify the frequency of each stressor. A second scale was designated for respondents to identify the intensity of each stressor. Six research questions and twenty-three hypotheses were designed to identify job stress as perceived by superintendents.

This chapter presents the data obtained from the survey responses returned by 144 Iowa public school superintendents. The data collected were analyzed by a one-way analysis of variance, t-test, correlation coefficient, statistical means, standard deviation and a post hoc analysis using the Scheffe' procedure. The statistical significance level in all cases is established at the .05

level. This chapter consists of the following sections: Demographic Data, Research Questions, and Hypotheses.

Demographic Data

Respondents were requested to provide certain demographic data. The data requested included: age, administrative category describing the superintendency, highest educational degree held, size of school district by student enrollment, geographic location, type of district, years in present position, total years in school administration, number of hours worked per week, number of hours of physical exercise per week, and current physical health status.

Age

The number and percentage of responses regarding age are shown in Table 2. The age range of fifty to fifty-nine represented the largest number of respondents with 42.2 percent. The age range of forty to forty-nine was represented by 31.9 percent. Of the respondents, 7.6 percent were under forty years of age while none were under thirty.

Table 2
Number and Percentage of Respondents by Age

Age	Frequency	Percent Relative Frequency	Percent Cumulative Frequency
Under 30	0	0	0
30-39	11	7.6	7.6
40-49	46	31.9	39.5
50-59	68	47.2	86.7
60 or Over	18	12.5	99.2
Missing	1	0.8	100.0

Administrative Category Describing
the Superintendency

Table 3 presents administrative category describing the superintendency. The category of "superintendent with building principals" consisted of 81.3 percent of the total responses. The categories of "sole administrator in the district" and "superintendent/secondary principal combination" were represented by one respondent in each category. Sixteen percent of the respondents served in a superintendent/elementary principal combination.

Table 3
Number and Percentage of Respondents by Administrative
Category Describing Superintendency

Category	Frequency	Percent Relative Frequency	Percent Cumulative Frequency
Superintendent with Building Principals	117	81.30	81.3
Sole Administrator in District	1	0.7	81.9
Superintendent in Two Districts	2	1.4	83.3
Superintendent/ Elementary Principal Combination	23	16.0	99.3
Superintendent/ Secondary Principal Combination	1	0.7	100.0

Highest Educational Degree Held

Table 4 reports data on the highest educational degree held by responding Iowa superintendents. All the respondents indicated that they held at least a master's degree. Approximately 80 percent of the respondents indicated that they had attained higher educational degrees than a master's degree. The highest educational degree, the doctorate, had been earned by 28.5 percent of the total group.

Table 4
Number and Percentage of Respondents by Highest
Educational Degree Held

Degree	Frequency	Percent Relative Frequency	Percent Cumulative Frequency
Master's	29	20.1	20.1
Ed.S.	74	51.4	71.5
Ed.D. or Ph.D.	41	28.5	100.0

Size of School District

The number and percentage of responses according to the size of school district by student enrollment are reported in Table 5. The number of superintendents representing each of the district size categories was very similar. The number of respondents in the 0 to 499 and 500 to 799 size categories were identical representing 47.2 percent of the total sample. The district with a student enrollment of 800 to 1,499 employed the most respondents consisting of 27.1 percent. The largest size school district by student enrollment was 1,500 and over and was represented by 25.7 percent of the respondents.

Table 5
Number and Percentage of Respondents by Size of
School District

Student Enrollment	Frequency	Percent Relative Frequency	Percent Cumulative Frequency
0-499	34	23.6	23.6
500-799	34	23.6	47.2
800-1,499	39	27.1	74.3
1,500 and Over	37	25.7	100.0

Geographic Location

On the modified ASI, superintendents were requested to identify the Area Education Agency in which their school district is located. A map of the state of Iowa showing the location of each Area Education Agency is found in Appendix E. School districts located in Area Education Agency 15 were used in the pilot testing of the modified ASI and therefore were excluded in the final study. Table 6 shows the geographic distribution of the respondents according to Area Education Agencies. The distribution of respondents ranged from 3.5 percent to 6.9 percent for each Area Education Agency except for two. Area Education Agency 11 was represented by 18.8 percent of the respondents while Area Education Agency 5 was represented by 12.5 percent.

Table 6
Number and Percentage of Respondents by
Geographic Location

Area Education Agency	Frequency	Percent Relative Frequency	Percent Cumulative Frequency
1	8	5.6	5.6
2	8	5.6	11.2
3	5	3.5	14.7
4	6	4.2	18.9
5	18	12.5	31.4
6	7	4.9	36.3
7	10	6.9	43.2
9	8	5.6	49.8
10	10	6.9	55.7
11	27	18.8	74.5
12	10	6.9	81.4
13	10	6.9	88.3
14	10	6.9	95.2
16	6	4.2	99.4
Missing	1	0.6	100.0

Type of School District

Table 7 presents data on the type of school district in which the respondents were working. Representing 80.6 percent of the total group, 116 of the superintendents described their districts as rural. Approximately one-fifth of the respondents described their districts as urban or suburban.

Table 7
Number and Percentage of Respondents by Type of
School District

Type of District	Frequency	Percent Relative Frequency	Percent Cumulative Frequency
Rural	116	80.6	80.6
Urban	11	7.6	88.2
Suburban	16	11.1	99.3
Missing	1	0.7	100.0

Years in Present Position

Data concerning the number of years respondents had served in their present position are displayed in Table 8. Approximately one-fifth of the respondents had served in their present position one or two years. Of the respondents, 43.8 percent had held their current position five years or less. Sixteen percent had been in their current position six to ten years. One-third of the superintendents were represented in the eleven to twenty year range, while 6.3 percent of the respondents had held their current position as superintendent for more than twenty years.

Table 8
Number and Percentage of Respondents by Years in
Present Position

Years	Frequency	Percent Relative Frequency	Percent Cumulative Frequency
1-2	27	18.8	18.8
3-5	36	25.0	43.8
6-10	23	16.0	59.8
11-15	30	20.8	80.6
16-20	18	12.5	93.1
Over 20	9	6.3	99.4
Missing	1	0.6	100.0

Years in Administration

The number and percentage of responses by total years in school administration are reported in Table 9. Approximately one-fifth of the superintendents had five or less years of administrative experience. Nearly 82 percent of the respondents had been in school administration more than ten years, while approximately 40 percent had been in administration over twenty years.

Table 9
Number and Percentage of Respondents by Total Years
in Administration

Years	Frequency	Percent Relative Frequency	Percent Cumulative Frequency
1-2	2	1.4	1.4
3-5	7	4.9	6.3
6-10	17	11.8	18.1
11-15	29	20.1	38.2
16-20	32	22.2	60.4
Over 20	57	39.6	100.0

Hours Worked

Table 10 shows the number of hours worked per week as reported by the respondents. No superintendents worked less than forty hours per week. Approximately 80 percent of the respondents worked from forty-six to sixty hours per week. One-fourth of the respondents worked from forty-six to fifty hours. Fifty superintendents, representing 34.7 percent of the total group, worked from fifty-one to fifty-five hours. Almost 12 percent of the respondents worked over sixty hours per week.

Table 10
Number and Percentage of Respondents by Number of
Hours Worked Per Week

Hours	Frequency	Percent Relative Frequency	Percent Cumulative Frequency
Less than 40	0	0	0
40-45	5	3.5	3.5
46-50	37	25.7	29.2
51-55	50	34.7	63.9
56-60	31	21.5	85.4
61-65	11	7.6	93.0
66-70	3	2.1	95.1
Over 70	3	2.1	97.2
Missing	4	2.8	100.0

Physical Exercise

Data on the number of hours of physical exercise per week are indicated in Table 11. Of the respondents, 15.3 percent exercised less than one hour per week.

Approximately three-fourths of the total group reported exercising in almost identical proportions into the two categories of one to three and four to six hours.

Approximately 10 percent of the respondents exercised more than six hours per week.

Table 11

Number and Percentage of Respondents by Number of
Hours of Physical Exercise per Week

Hours	Frequency	Percent Relative Frequency	Percent Cumulative Frequency
Less than 1	22	15.3	15.3
1-3	54	37.5	52.8
4-6	51	35.4	88.2
7-9	11	7.6	95.8
10-12	4	2.8	98.6
Missing	2	1.4	100.0

Health Status

Table 12 displays the number and percentage of responses according to health status. Over three-fourths of the superintendents indicated that their health status was better than average. Of the respondents, 40.3 percent rated themselves in good health. Approximately 18 percent of the superintendents indicated that they had average health, while 2.1 percent indicated fair health. No respondent reported poor health status.

Table 12

Number and Percentage of Respondents by Estimated
Current Physical Health Status

Health Status	Frequency	Percent Relative Frequency	Percent Cumulative Frequency
Excellent	58	40.3	40.3
Good	55	38.2	78.5
Average	26	18.1	96.6
Fair	3	2.1	98.7
Poor	0	0	98.7
Missing	2	1.3	100.0

Research Questions

This study attempted to answer six research questions. They are:

1. What is the frequency to which each of the stressors exists among Iowa public school superintendents?
2. What is the intensity to which each of the stressors exists among Iowa public school superintendents?
3. What is the total mean frequency to which stress exists among Iowa public school superintendents according to geographic location?
4. What is the total mean intensity to which stress exists among Iowa public school superintendents according to geographic location?

5. What percentage of total stress in the life of a superintendent in Iowa is estimated to be a result of the superintendent's job?

6. What various stress coping techniques have been used by Iowa public school superintendents?

Frequency to Which Each of the
Stressors Existed

Research Question One was concerned with the frequency to which each of the stressors existed among Iowa public school superintendents. Table 13 presents data concerning the thirty-five individual stressors according to frequency responses. The range of mean scores for individual stressors is from a high of 3.903 on "supervising and coordinating the tasks of many people" (Stressor 2) to a low of 1.614 on "trying to resolve differences between/among students" (Stressor 7). Twelve stressors had mean scores higher than 3.0. "Complying with state, federal and organizational rules and policies" (Stressor 27) had the second highest mean score followed by "preparing and allocating budget resources" (Stressor 21) and "feeling I have to participate in school activities outside of the normal working hours at the expense of my personal time" (Stressor 18) which shared an identical mean score of 3.764. Seventeen stressors had mean scores within the range of 2.0 to 2.9. Six stressors had mean scores lower than 2.0. "Feeling that I have too heavy a work load"

Table 13

Rank, Mean Score, and Standard Deviation of Individual
Stressors by Frequency Responses

Rank	Stressor	Item No. Modified ASI	Mean	Standard Deviation
1	Supervising and coordinating the tasks of many people	2	3.903	.831
2	Complying with state, federal and organizational rules and policies	27	3.832	.831
3.5	Preparing and allocating budget resources	21	3.764	1.010
3.5	Feeling I have to participate in school activities outside of the normal working hours at the expense of my personal time	18	3.764	1.017
5	Being involved in the collective bargaining process	24	3.727	1.034
6	Imposing excessively high expectations on myself	10	3.545	.984
7	Writing memos, letters and communications	12	3.458	1.010
8	Having to make decisions that affect the lives of individual people that I know (colleagues, staff, students, etc.)	17	3.382	.924
9	Trying to gain public approval and/or financial support for school programs	17	3.382	.924
10	Being interrupted by telephone calls	1	3.313	.897
11	Trying to complete reports and paper work on time	32	3.245	.966

Table 13 (continued)

Rank	Stressor	Item No. Modified ASI	Mean	Standard Deviation
12	Evaluating staff member's performance	25	3.120	1.048
13	Feeling that meetings take up too much time	31	2.957	1.006
14	Speaking in front of groups	14	2.931	1.082
15	Having my work interrupted by staff members who want to talk	9	2.923	.935
16	Feeling that I have too heavy a work load, one that I cannot possibly finish during the normal work day	26	2.838	1.230
17	Feeling staff members don't understand my goals and expectations	3	2.818	.793
18	Trying to solve parent/school conflicts	20	2.785	.870
19	Trying to influence my board's actions and decisions that affect me	34	2.775	1.020
20	Administering the negotiated contract (grievances, interpretations, etc.)	29	2.728	1.092
21	Feeling that the progress of of my job is not what it should or could be	28	2.720	1.037
22	Feeling pressure for better job performance over and above what I think is reasonable	11	2.694	1.117
23	Attempting to meet social expectations (housing, clubs, friends, etc.)	15	2.639	1.186

Table 13 (continued)

Rank	Stressor	Item No. Modified ASI	Mean	Standard Deviation
24	Thinking that I will not be able to satisfy the conflicting demands of those who have authority over me	6	2.620	1.083
25	Trying to resolve differences between/among staff members	33	2.426	.872
26	Trying to resolve differences with my board members	13	2.378	1.047
27	Feeling that I have too much responsibility delegated to me by the board of education	19	2.336	1.100
28	Not knowing what my board thinks of me or how they evaluate my performance	16	2.189	.978
29	Knowing I can't get information needed to carry out my job properly	5	2.014	.859
30	Feeling that I have too little authority to carry out responsibilities assigned to me	22	1.986	1.032
31	Feeling that I am not fully qualified to handle my job	4	1.863	.965
32	Being unclear on just what the scope and responsibilities of my job are	30	1.793	.844
33	Handling student discipline problems	23	1.785	.841
34	Feeling not enough is expected of me by the board members	8	1.704	.806
35	Trying to resolve differences between/among students	7	1.674	.762

(Stressor 26) had the largest variance with a standard deviation of 1.230, while "trying to resolve differences between/among students" (Stressor 7) had the lowest variance with a standard deviation of .762.

Intensity to Which Each of the
Stressors Existed

Research Question Two was concerned with the intensity to which each of the stressors existed among Iowa public school superintendents. Data concerning the thirty-five individual stressors according to intensity responses are shown in Table 14. The range of mean scores for individual stressors is from a high of 3.743 on "being involved in the collective bargaining process" (Stressor 24) to a low of 1.613 on "feeling not enough is expected of me by the board members" (Stressor 8). Ten stressors had mean scores higher than 3.0. Stress 27, "complying with state, federal and organizational rules and policies" had the second highest mean score, while "having to make decisions that affect the lives of individual people that I know (colleagues, staff, students, etc.)" (Stressor 17) had the third highest mean score. Twenty-one stressors had mean scores within the range of 2.0 to 2.9. "Feeling that I am not fully qualified to handle my job" (Stressor 4), "being unclear on just what the scope and responsibilities of my job are" (Stressor 30), "trying to resolve differences between/among students" (Stressor 7), and "feeling not enough is expected of me by

Table 14

Rank, Mean Score, and Standard Deviation of Individual
Stressors by Intensity Responses

Rank	Stressor	Item No. Modified ASI	Mean	Standard Deviation
1	Being involved in the collective bargaining process	24	3.743	1.184
2	Complying with state, federal and organizational rules and policies	27	3.720	.996
3	Having to make decisions that affect the lives of individual people that I know (colleagues, staff, students, etc.)	17	3.590	1.118
4	Imposing excessively high expectations on myself	10	3.469	1.054
5	Trying to gain public approval and/or financial support for school programs	35	3.408	1.079
6	Preparing and allocating budget resources	21	3.361	1.144
7	Feeling I have to participate in school activities outside of the normal working hours at the expense of my personal time	18	3.243	1.264
8	Trying to complete reports and paper work on time	32	3.161	1.098
9	Trying to resolve parent/school conflicts	20	3.111	1.091
10	Evaluating staff member's performance	25	3.063	1.073
11	Supervising and coordinating the tasks of many people	2	2.993	1.068

Table 14 (continued)

Rank	Stressor	Item No. Modified ASI	Mean	Standard Deviation
12	Feeling that I have too heavy a work load, one that I cannot possibly finish during the normal work day	26	2.944	1.276
13	Administering the negotiated contract (grievances, interpretations, etc.)	29	2.869	1.193
14	Trying to influence my board's actions and decisions that affect me	34	2.852	1.136
15	Trying to resolve differences with my board members	13	2.811	1.300
16	Thinking that I will not be able to satisfy the conflicting demands of those who have authority over me	6	2.768	1.264
17	Trying to resolve differences between/among staff members	33	2.766	1.132
18	Feeling that the progress of of my job is not what it should or could be	28	2.762	1.094
19	Feeling that meetings take up too much time	31	2.759	1.088
20	Feeling staff members don't understand my goals and expectations	3	2.739	1.134
21	Feeling pressure for better job performance over and above what I think is reasonable	11	2.736	1.206
22	Writing memos, letters and communications	12	2.583	1.041

Table 14 (continued)

Rank	Stressor	Item No. Modified ASI	Mean	Standard Deviation
23	Not knowing what my board thinks of me or how they evaluate my performance	16	2.343	1.157
24	Speaking in front of groups	14	2.340	1.065
25	Being interrupted by telephone calls	1	2.313	.971
26	Attempting to meet social expectations (housing, clubs, friends, etc.)	15	2.257	1.120
27	Feeling that I have too much responsibility delegated to me by the board of education	19	2.224	1.141
28	Having my work interrupted by staff members who want to talk	9	2.210	.992
29	Feeling that I have too little authority to carry out responsibilities assigned to me	22	2.129	1.180
30	Knowing I can't get information needed to carry out my job properly	5	2.049	1.138
31	Handling student discipline problems	23	2.015	1.065
32	Feeling that I am not fully qualified to handle my job	4	1.928	1.237
33	Being unclear on just what the scope and responsibilities of my job are	30	1.821	.923
34	Trying to solve differences between/among students	7	1.651	.835
35	Feeling not enough is expected of me by the board members	8	1.613	.882

the board members" (Stressor 8) had mean scores lower than 2.0. "Trying to resolve differences with my board members" (Stressor 13) had the largest variance with a standard deviation of 1.300, while "trying to resolve differences between/among students" (Stressor 7) had the lowest variance with a standard deviation of .835.

Frequency to Which Stress Existed Among
Superintendents by Geographic Location

Research Question Three was concerned with the total mean frequency to which stress existed among Iowa public school superintendents by geographic location. Table 15 displays data on the frequency to which stress existed among superintendents by geographic location. The range of mean scores for the frequency to which stress existed by geographic location is from a high of 3.1200 in Area Education Agency 1 to a low of 2.4627 in Area Education Agency 2. Area Education Agency 10 ranked second from the highest mean score with a score of 3.0449 followed by Area Education Agency 7 which ranked third from the highest with a mean score of 2.9607. Area Education Agency 16 had the largest variance with a standard deviation of .7143, while Area Education Agency 13 had the lowest variance with a standard deviation of .2018

Table 15

Mean, Standard Deviation, and Rank of Frequency to
Which Stress Existed Among Superintendents by
Geographic Location

Geographic Location by AEA	Mean	Standard Deviation	Rank
1	3.1200	.2951	1
2	2.4629	.5004	14
3	2.7857	.4657	8
4	2.5857	.2170	11.5
5	2.7184	.3744	10
6	2.7952	.6924	7
7	2.9607	.3069	3
9	2.8286	.5178	6
10	3.0449	.2779	2
11	2.8571	.5303	5
12	2.8743	.5803	4
13	2.7524	.2018	9
14	2.4653	.3167	13
16	2.5857	.7143	11.5

Intensity to Which Stress Existed Among
Superintendents by Geographic Location

Research Question Four was concerned with the total mean intensity to which stress existed among Iowa public school superintendents by geographic location. Data concerning the intensity to which stress existed among superintendents by geographic location are shown in Table 16. The range of mean scores for the intensity to which stress existed by geographic location is from a high of 2.9943 in Area Education Agency 1 to a low of 2.2057 in Area Education Agency 2. Area Education Agency 10 ranked second from the highest mean score with a score of 2.9224 followed by Area Education Agency 7 which ranked third from the highest with a mean score of 2.8179. Area Education Agency 3 had the largest variance with a standard deviation of .9538, while Area Education Agency 2 had the lowest variance with a standard deviation of .3738.

Table 16

Mean, Standard Deviation, and Rank of Intensity to
Which Stress Existed Among Superintendents by
Geographic Location

Geographic Location by AEA	Mean	Standard Deviation	Rank
1	2.9943	.4723	1
2	2.2057	.3738	14
3	2.6571	.9538	8
4	2.5286	.5508	10
5	2.7918	.4951	5
6	2.8048	.7593	4
7	2.8179	.3899	3
9	2.3771	.7958	12
10	2.9224	.6515	2
11	2.6545	.6359	9
12	2.7200	.5249	6.5
13	2.7200	.4073	6.5
14	2.5184	.5067	11
16	2.2857	.7366	13

Total Stress in Life Resulting
from Superintendency

Research Question Five was concerned with what percentage of total stress in the life of a superintendent in Iowa was estimated to be a result of the superintendent's job. Respondents indicated that a mean score of 66.496 percent of total stress in their lives resulted from their job. Data on the percentage of stress respondents felt

resulted from their job are shown in Table 17. One-half of the superintendents perceived that 80 percent or more of the total stress in their lives was caused by their job. Approximately 12 percent of the respondents indicated that less than 50 percent of the total stress in their lives resulted from their work.

Table 17

Number and Percentage of Respondents by Perceived Level of Stress Resulting from Their Job

Stress Level Percentage	Frequency	Percent Relative Frequency	Percent Cumulative Frequency
10	3	2.1	2.1
20	4	2.8	4.9
30	9	6.3	11.2
40	2	1.4	12.6
50	19	13.2	25.8
60	14	9.7	35.5
70	15	10.4	45.9
80	45	31.3	77.2
90	23	15.8	93.0
99+	5	3.5	96.5
Missing	5	3.5	100.0

Stress Coping Techniques

Research Question Six was concerned with the various stress coping techniques that had been used by Iowa public school superintendents. In an open-ended question

respondents were asked to list activities utilized in coping with stress. Of the respondents, 92.4 percent identified at least one activity used for coping with stress. The coping activities were divided into three major categories: (1) cognitive and psychological activities; (2) physiological activities; and (3) interpersonal and organizational management activities. Cognitive and psychological activities were the most frequently used activities. Almost two-thirds of the respondents indicated using activities in this category. Physiological activities were used by 28.7 percent of the respondents, while 5.8 percent responded using interpersonal and organizational management activities.

Cognitive and psychological activities are related to a positive approach to problems and a philosophy of living. The rank and frequency of activities categorized as cognitive and psychological activities are illustrated in Table 18. The most frequently listed activity in this category was being involved in a hobby such as fishing, woodworking, hunting, gardening, and rebuilding foreign cars. Ranking second with one less response than being involved in a hobby was leaving town to get totally away from the employment environment. The third most popular activity indicated was spending time with family, while leaving school work and problems at school was the fourth most frequently cited activity. Almost one-half of the

total responses in the cognitive and psychological activities category was one of the four top-ranking activities. The activities of establishing outside interest and having discussions with fellow administrators were each cited by ten respondents. Religious beliefs and faith ranked seventh among the activities. Selected responses cited in the cognitive and psychological activities group included the following: placing problems in proper perspective, maintaining a positive mental attitude, maintaining a sense of humor, and recognizing the existence of stress on the job.

Physiological activities included physical exercise or work; techniques practiced specifically for the purpose of relaxation, such as meditation; and the use of alcohol or drugs. The rank and frequency of physiological activities are presented in Table 19. Over 50 percent of the responses in the physiological activity category referred to participating in exercise and athletic events as a means of coping with stress. Of the eighty-nine responses, one referred to meditation and one referred to biofeedback. Drinking alcohol as a means of coping with stress was listed by six respondents while taking drugs was listed by one respondent.

The interpersonal and organizational management skills category was characterized by the least amount of responses. Table 20 presents data concerning interpersonal

Table 18
Cognitive and Psychological Activities for Coping
with Stress

Rank	Frequency	Activity
1	31	Being involved in hobbies, such as fishing, woodworking, hunting, gardening, rebuilding foreign cars, etc.
2	30	Leaving town to get totally away from the employment environment
3	22	Spending time with family
4	15	Leaving school work and problems at school
5.5	10	Establishing outside interest
5.5	10	Having discussions with fellow administrators
7	8	Religious beliefs and faith
8.5	7	Placing problems in proper perspective
8.5	7	Support of non-school friends
11	6	Maintaining a positive mental attitude
11	6	Avoiding taking problems personally
11	6	Maintaining a sense of humor
13	5	Confiding in others
15.5	4	Recognize the existence of stress on the job
15.5	4	Vacation during the school year
15.5	4	Traveling
15.5	4	Social activities

Table 18 (continued)

Rank	Frequency	Activity
18.5	3	Participating in local service organizations
18.5	3	Taking one day at a time
22.5	2	Taking brief breaks during the day
22.5	2	Setting realistic goals and work to achieve them
22.5	2	Getting away from people
22.5	2	Changing work tasks during the day
22.5	2	Maintaining a positive self-concept
22.5	2	Forgetting problems quickly and moving on to next item
28.5	1	Approaching problems with confidence
28.5	1	Looking forward to early retirement
28.5	1	Setting aside time for self
28.5	1	Singing in a gospel quartet
28.5	1	Using release time
28.5	1	Daily devotional time

Table 19
Physiological Activities for Coping with Stress

Rank	Frequency	Activity
1	48	Participating in exercise and athletic events such as: jogging, walking, golf, biking, tennis, weight lifting, etc.
2	8	Reading a book or magazine
3.5	6	Participating in or watching sports
3.5	6	Drinking alcohol
5.5	3	Listening to music
5.5	3	Participating in outdoor activities
7.5	2	Sleeping
7.5	2	Officiating sports
14	1	Watching television
14	1	Smoking
14	1	Playing cards
14	1	Working simultaneously in another occupation
14	1	Meditation
14	1	Biofeedback
14	1	Taking drugs
14	1	Sexual involvement
14	1	Rocking in a rocking chair
14	1	Eating proper diet
14	1	Playing chess

and organizational management activities. Eighteen respondents listed an activity in this category. Of the eight activities cited, delegating work to the appropriate people was the most frequently cited with five responses. Working with competent personnel and team management were each referred to by three respondents. Other interpersonal and organizational management activities used as coping techniques included participating in professional organizations, formulating resolutions to each problem, time management, communicating effectively, and persistence until a task is completed.

Table 20

Interpersonal and Organizational Management Skills for
Coping with Stress

Rank	Frequency	Activity
1	5	Delegating work to the appropriate people
2.5	3	Working with competent personnel
2.5	3	Team management
4.5	2	Participating in professional organizations
4.5	2	Formulating resolutions to each problem
7	1	Time management
7	1	Communicating effectively
7	1	Persistence until a task is completed

Hypotheses

Twenty-three hypotheses were designed to identify job stress as perceived by Iowa public school superintendents. Data were analyzed using various statistical methods to determine if the hypotheses were accepted or rejected. The statistical significance level in all hypotheses was established at the .05 level.

Hypothesis One

There is no difference in frequency and intensity between the thirty-five stressors among Iowa public school superintendents. The results of a t-test are illustrated in Table 21. Using a t-test analysis, a comparison between the total mean frequency of stress and the total mean intensity of stress yields no significant difference at the .05 level.

Table 21

t-Test for Differences in Total Mean Frequency of Stress and Total Mean Intensity of Stress

Frequency (n = 107)		Intensity (n = 107)		t	p
M	SD	M	SD		
2.7963	.465	2.6865	.578	2.86	.005

Hypothesis Two

There is no difference in the mean frequency of the five factors identified by Swent among Iowa public school

superintendents. Consisting of seven stressors each, the five factors identified by Swent are: administrative constraints, administrative responsibility, interpersonal relations, intrapersonal conflicts, and role expectations. Table 22 reports a comparison of relationships between r values of pairs of factors using the Pearson Correlation Coefficient. Computed values of r ranged from a high of .7205 to a low of .3824. No comparison yielded a significant difference at the .05 level.

Table 22

Correlation Coefficient Comparison for the Total Mean
Frequency of Factors Identified by Swent

	Admin. Constr.	Admin. Respons.	Interpersonal Relations	Intrapersonal Relations	Role Expect.
Admin. Constr.	1.0000 (0)	.6099 (130)	.3824 (125)	.5365 (132)	.4157 (137)
Admin. Respons.		1.0000 (0)	.4010 (116)	.5425 (124)	.4026 (128)
Interpersonal Relations			1.0000 (0)	.5651 (117)	.6022 (122)
Intrapersonal Relations				1.0000 (0)	.7205 (133)
Role Expectations					1.0000 (0)

Hypothesis Three

There is no difference in the mean intensity of the five factors identified by Swent among Iowa public school

superintendents. Table 23 reports a comparison of relationships between r values of pairs of factors using the Pearson Correlation Coefficient. Computed values of r ranged from a high of .7179 to a low of .4466. No comparison yielded a significant difference at the .05 level.

Table 23
Correlation Coefficient Comparison for the Total Mean
Intensity of Factors Identified by Swent

	Admin. Constr.	Admin. Respons.	Interpersonal Relations	Intrapersonal Relations	Role Expect.
Admin. Constr.	1.0000 (0)	.6138 (131)	.4466 (124)	.5405 (132)	.4587 (137)
Admin. Respons.		1.0000 (0)	.6129 (116)	.6245 (125)	.5843 (129)
Interpersonal Relations			1.0000 (0)	.5635 (116)	.5989 (121)
Intrapersonal Relations				1.0000 (0)	.7179 (133)
Role Expectations					1.0000 (0)

Hypothesis Four

There is no difference in the total mean frequency of stressors among the five identified age groups of Iowa public school superintendents. The five identified age groups were: under thirty, thirty to thirty-nine, forty to forty-nine, fifty to fifty-nine and sixty or over. Table 24

reports a one-way analysis of variance for the total mean frequency of stressors among the five identified age groups. An F ratio of 2.0879 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure revealed no significant differences between individual groups.

Table 24

Analysis of Variance for the Total Mean Frequency of Stressors Among Age Groups

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	3	1.3024	.4341	2.0879
Within Groups	104	21.6246	.2079	
Total	107	22.9270		

Hypothesis Five

There is a difference in the total mean intensity of stressors among the five identified age groups of Iowa public school superintendents. Table 25 reports a one-way analysis of variance for the total mean intensity of stressors among the five identified age groups. An F ratio of 4.8275 was obtained which exceeded the established .05 significance level. A post hoc analysis using the Scheffe' procedure indicated a significant difference at the .05 level between the identified age groups of forty to forty-

nine years and fifty to fifty-nine years. The mean score for the age group of forty to forty-nine was 2.9509, while the mean score for the age group of fifty to fifty-nine was 2.4846.

Table 25

Analysis of Variance for the Total Mean Intensity of Stressors Among Age Groups

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	3	4.5061	1.5020	4.8275*
Within Groups	104	32.3585	.3111	
Total	107	36.8646		

*p .05

Hypothesis Six

There is no difference in the total mean frequency of stressors among the five identified superintendency roles of Iowa public school superintendents. The five identified superintendency roles were: suuperintendent with building principals, sole administrator in a district, superintendent in two districts, superintendent/elementary principal combination, and superintendent/elementary principal combination, and superintendent/secondary principal combination. Table 26 reports a one-way analysis of variance for the total mean frequency of stressors among the

five identified superintendency roles. An F ratio of 2.1527 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure revealed no significant differences between individual groups.

Table 26

Analysis of Variance for the Total Mean Frequency of Stressors Among Superintendency Roles

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	4	1.7688	.4422	2.1527
Within Groups	103	21.1582	.2054	
Total	107	22.9270		

Hypothesis Seven

There is no difference in the total mean intensity of stressors among the five identified superintendency roles of Iowa public school superintendents. Table 27 reports a one-way analysis of variance for the total mean intensity of stressors among the five identified superintendency roles. An F ratio of 1.9588 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure revealed no significant differences between individual groups.

Table 27

Analysis of Variance for the Total Mean Intensity of
Stressors Among Superintendency Roles

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	4	2.6060	.6515	1.9588
Within Groups	103	34.2586	.3326	
Total	107	36.8646		

Hypothesis Eight

There is no difference in the total mean frequency of stressors among the three identified college degree levels among Iowa public school superintendents. The three identified college degree levels were: M.A., Educational Specialist Degree and Ed.D. or Ph.D. Table 28 reports a one-way analysis of variance for the total mean frequency of stressors among the three identified college degree levels. An F ratio of .4679 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure revealed no significant differences between individual groups.

Table 28

Analysis of Variance for the Total Mean Frequency of
Stressors Among College Degree Levels

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	2	.2025	.1013	.4679
Within Groups	105	22.7245	.2164	
Total	107	22.9270		

Hypothesis Nine

There is no difference in the total mean intensity of stressors among the three identified college degree levels among Iowa public school superintendents. Table 29 reports a one-way analysis of variance for the total mean intensity of stressors among the three identified college degree levels. An F ratio of .6085 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure revealed no significant differences between individual groups.

Table 29

Analysis of Variance for the Total Mean Intensity of
Stressors Among College Degree Levels

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	2	.4224	.2112	.6085
Within Groups	105	36.4423	.3471	
Total	107	36.8646		

Hypothesis Ten

There is no difference in the total mean frequency of stressors among the four identified district sizes among Iowa public school superintendents. The four identified district sizes were: 0 to 499, 500 to 799, 800 to 1,499 and 1,500 and over. Table 30 reports a one-way analysis of variance for the total mean frequency of stressors among the four identified district sizes. An F ratio of .9876 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure revealed no significant differences between individual groups.

Table 30

Analysis of Variance for the Total Mean Frequency of
Stressors Among District Sizes

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	3	.6350	.2117	.9876
Within Groups	104	22.2920	.2143	
Total	107	22.9270		

Hypothesis Eleven

There is no difference in the total mean intensity of stressors among the four identified district sizes among Iowa public school superintendents. Table 31 reports a one-way analysis of variance for the total mean intensity of stressors among the four identified district sizes. An F ratio of .0399 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure revealed no significant differences between individual groups.

Table 31

Analysis of Variance for the Total Mean Intensity of
Stressors Among District Sizes

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	3	.0428	.0141	.0399
Within Groups	104	36.8223	.3541	
Total	107	36.8646		

Hypothesis Twelve

There is no difference in the total mean frequency of stressors among the three identified district descriptors among Iowa public school superintendents. The three identified district descriptors were: rural, urban, and suburban. Table 32 reports a one-way analysis of variance for the total mean frequency of stressors among the three identified district descriptors. An F ratio of 3.2286 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure indicated a significant difference at the .05 level between the groups of identified district descriptors of rural and urban. The mean score for the rural group was 2.7607, while the mean score for the urban group was 3.1651.

Table 32

Analysis of Variance for the Total Mean Frequency of
Stressors Among District Descriptors

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	2	1.3403	.6701	3.2286
Within Groups	104	21.5862	.2076	
Total	106	22.9264		

Hypothesis Thirteen

There is no difference in the total mean intensity of stressors among the three identified district descriptors among Iowa public school superintendents. Table 33 reports a one-way analysis of variance for the total mean intensity of stressors among the three identified district descriptors. An F ratio of .5220 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure revealed no significant differences between individual groups.

Table 33

Analysis of Variance for the Total Mean Intensity of
Stressors Among District Descriptors

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	2	.3635	.1818	.5220
Within Groups	104	36.2152	.3482	
Total	106	36.5787		

Hypothesis Fourteen

There is no difference in the total mean frequency of stressors in relationship to the number of years in the present position among Iowa public school superintendents. The number of years in the present position was grouped as follows: one to two, three to five, six to ten, eleven to fifteen, sixteen to twenty and over twenty years. Table 34 reports a one-way analysis of variance for the total mean frequency of stressors in relationship to the number of years in the present position. An F ratio of .5596 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure revealed no significant differences between individual groups.

Table 34

Analysis of Variance for the Total Mean Frequency of
Stressors by the Number of Years in the
Present Position

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	5	.6124	.1225	.5596
Within Groups	101	22.1076	.2189	
Total	106	22.7200		

Hypothesis Fifteen

There is no difference in the total mean intensity of stressors in relationship to the number of years in the present position among Iowa public school superintendents. Table 35 reports a one-way analysis of variance for the total mean intensity of stressors in relationship to the number of years in the present position. An F ratio of .6630 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure revealed no significant differences between individual groups.

Table 35

Analysis of Variance for the Total Mean Intensity of
Stressors by the Number of Years in the
Present Position

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	5	1.1516	.2303	.6630
Within Groups	101	35.0841	.3474	
Total	106	36.2356		

Hypothesis Sixteen

There is no difference in the total mean frequency of stressors in relationship to the total number of years in administration among Iowa public school superintendents. The total number of years in administration was grouped as follows: one to two, three to five, six to ten, eleven to fifteen, sixteen to twenty and over twenty years. Table 36 reports a one-way analysis of variance for the total mean frequency of stressors in relationship to the total number of years in administration. An F ratio of .5678 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure revealed no significant differences between individual groups.

Table 36

Analysis of Variance for the Total Mean Frequency of
Stressors by the Total Number of Years in
Administration

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	5	.6208	.1242	.5678
Within Groups	102	22.3062	.2187	
Total	107	22.9270		

Hypothesis Seventeen

There is no difference in the total mean intensity of stressors in relationship to the total number of years in administration among Iowa public school superintendents. Table 37 reports a one-way analysis of variance for the total mean intensity of stressors in relationship to the total number of years in administration. An F ratio of 1.7417 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure revealed no significant differences between individual groups.

Table 37

Analysis of Variance for the Total Mean Intensity of
Stressors by the Total Number of Years in
Administration

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	5	2.8998	.5800	1.7417
Within Groups	102	33.9648	.3330	
Total	107	36.8646		

Hypothesis Eighteen

There is no difference in the total mean frequency of stressors in relationship to the number of hours worked per week among Iowa public school superintendents. The hours worked per week were grouped as follows: less than forty, forty to forty-five, forty-six to fifty, fifty-one to fifty-five, fifty-six to sixty, sixty-one to sixty-five, sixty-six to seventy and over seventy hours. Table 38 reports a one-way analysis of variance for the total mean frequency of stressors in relationship to the number of hours worked per week. An F ratio of 1.1474 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure revealed no significant differences between individual groups.

Table 38

Analysis of Variance for the Total Mean Frequency of
Stressors in Relationship to the Number of Hours
Worked per Week

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	6	1.4402	.2400	1.1474
Within Groups	98	20.5028	.2092	
Total	104	21.9431		

Hypothesis Nineteen

There is no difference in the total mean intensity of stressors in relationship to the number of hours worked per week among Iowa public school superintendents. Table 39 reports a one-way analysis of variance for the total mean intensity of stressors in relationship to the number of hours worked per week. An F ratio of .5558 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure revealed no significant differences between individual groups.

Table 39

Analysis of Variance for the Total Mean Intensity of
Stressors in Relationship to the Number of Hours
Worked per Week

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	6	1.1736	.1956	.5558
Within Groups	98	34.4907	.3519	
Total	104	35.6643		

Hypothesis Twenty

There is no difference in the total mean frequency of stressors in relationship to the number of hours of physical exercise per week among Iowa public school superintendents. The number of hours of physical exercise per week was grouped as follows: less than one, one to three, four to six, seven to nine, ten to twelve and over twelve hours. Table 40 reports a one-way analysis of variance for the total mean frequency of stressors in relationship to the number of hours of physical exercise per week. An F ratio of 2.9139 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure indicated a significant difference at the .05 level between the groups which exercised four to six hours and seven to nine hours per week. The mean score for the group which exercised four to six hours per week was

2.6680, while the mean score for the group which exercised seven to nine hours per week was 3.2127.

Table 40

Analysis of Variance for the Total Mean Frequency of Stressors in Relationship to the Number of Hours of Physical Exercise per Week

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	4	2.3350	.5837	2.9139
Within Groups	102	20.4340	.2003	
Total	106	22.7689		

Hypothesis Twenty-one

There is no difference in the total mean intensity of stressors in relationship to the number of hours of physical exercise per week among Iowa public school superintendents. Table 41 reports a one-way analysis of variance for the total mean intensity of stressors in relationship to the number of hours of physical exercise per week. An F ratio of 3.2522 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure revealed no significant differences between individual groups.

Table 41

Analysis of Variance for the Total Mean Intensity of
Stressors in Relationship to the Number of Hours
of Physical Exercise per Week

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	4	4.0307	1.0077	3.2522
Within Groups	102	31.6044	.3098	
Total	106	35.6351		

Hypothesis Twenty-two

There is no difference in the total mean frequency of stressors in relationship to a self-identified level of current physical health among Iowa public school superintendents. The self-identified levels of current physical health were: excellent, good, average, fair and poor. Table 42 reports a one-way analysis of variance for the total mean frequency of stressors in relationship to a self-identified level of current physical health. An F ratio of .4931 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure revealed no significant differences between individual groups.

Table 42

Analysis of Variance for the Total Mean Frequency of
Stressors in Relationship to Level of Current
Physical Health

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	3	.3238	.1079	.4931
Within Groups	102	22.3261	.2189	
Total	105	22.6499		

Hypothesis Twenty-three

There is no difference in the total mean intensity of stressors in relationship to a self-identified level of current physical health among Iowa public school superintendents. Table 43 reports a one-way analysis of variance for the total mean intensity of stressors in relationship to a self-identified level of current physical health. An F ratio of .2738 revealed no statistically significant difference. A post hoc analysis using the Scheffe' procedure revealed no significant differences between individual groups.

Table 43

Analysis of Variance for the Total Mean Intensity of
Stressors in Relationship to the Level of Current
Physical Health

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Ratio
Between Groups	3	.2770	.0923	.2738
Within Groups	102	34.4049	.3373	
Total	105	34.6820		

CHAPTER FIVE

Summary, Conclusions, Discussion, and Recommendations

This chapter contains a summary of the study; conclusions based on the findings; a discussion of demographic variables, research questions, and hypotheses; and recommendations for future research.

Summary

The intent of the study was to explore the self perceptions of Iowa public school superintendents toward occupational stress. The purpose of the study was to determine (1) the frequency and intensity of occupational sources of stress as perceived by Iowa public school superintendents, (2) the relationship between perceived occupational sources of stress and demographic variables, and (3) stress management techniques used by superintendents. Forty superintendents from each of the four school district enrollment categories were randomly selected to participate in the study. Of the 160 questionnaires mailed, 144 questionnaires were returned representing a 90 percent response.

Using the modified Administrative Stress Index, respondents identified the frequency and intensity of

thirty-five stressors on two separate five-point Likert-type scales. Respondents were requested to provide pertinent demographic information. Information requested from the superintendents was: (1) age, (2) role in addition to superintendency, (3) highest degree held, (4) size of district, (5) geographic location of the district by Area Education Agency, (6) description of district as rural, urban, or suburban, (7) years in present position, (8) total years in administration, (9) hours worked per week, (10) hours of physical exercise, (11) self-reported current physical health, and (12) the percentage of total stress in life estimated to be a result of the superintendent's job.

All items listed on the modified ASI were computer analyzed using the SPSS programs. The significance in all statistical treatment was established at the .05 level. To analyze the data collected for the six research questions and the twenty-three hypotheses, a one-way analysis of variance, a post hoc analysis, Pearson Correlation Coefficient, and a t-test were utilized. Descriptive statistics were generated in the form of frequencies, means, standard deviations, and standard errors of measurement.

Conclusions

Based on data presented in the study, the following conclusions may be made:

1. There is no difference in frequency and intensity between the thirty-five stressors among Iowa public school

superintendents.

2. There is no difference in the mean frequency of the five factors identified by Swent.¹

3. There is no difference in the mean intensity of the five factors identified by Swent.²

4. There is no difference in the total mean frequency of stressors among the five identified age groups of Iowa public school superintendents.

5. There is a significant difference in the total mean intensity of stressors among the five identified age groups of Iowa public school superintendents.

6. There is no difference in the total mean frequency of stressors among the five identified superintendency roles of Iowa public school superintendents.

7. There is no difference in the total mean intensity of stressors among the five identified superintendency roles of Iowa public school superintendents.

8. There is no difference in the total mean frequency of stressors among the three identified college degree levels among Iowa public school superintendents.

9. There is no difference in the total mean intensity of stressors among the three identified college degree

¹Swent, "An Exploratory Study of the Perceptions of Oregon School Administrators on Occupational Sources of Stress," p. 4.

²Ibid.

levels among Iowa public school superintendents.

10. There is no difference in the total mean frequency of stressors among the four identified district sizes among Iowa public school superintendents.

11. There is no difference in the total mean intensity of stressors among the four identified district sizes among Iowa public school superintendents.

12. There is no difference in the total mean frequency of stressors among the three identified district descriptors among Iowa public school superintendents.

13. There is no difference in the total mean intensity of stressors among the three identified district descriptors among Iowa public school superintendents.

14. There is no difference in the total mean frequency of stressors in relationship to the number of years in the present position among Iowa public school superintendents.

15. There is no difference in the total mean intensity of stressors in relationship to the number of years in the present position among Iowa public school superintendents.

16. There is no difference in the total mean frequency of stressors in relationship to the total number of years in administration among Iowa public school superintendents.

17. There is no difference in the total mean intensity of stressors in relationship to the total number of years in administration among Iowa public school superintendents.

18. There is no difference in the total mean frequency

of stressors in relationship to the number of hours worked per week among Iowa public school superintendents.

19. There is no difference in the total mean intensity of stressors in relationship to the number of hours worked per week among Iowa public school superintendents.

20. There is no difference in the total mean frequency of stressors in relationship to the number of hours of physical exercise per week among Iowa public school superintendents.

21. There is no difference in the total mean intensity of stressors in relationship to the number of hours of physical exercise per week among Iowa public school superintendents.

22. There is no difference in the total mean frequency of stressors in relationship to a self-identified level of current physical health among Iowa public school superintendents.

23. There is no difference in the total mean intensity of stressors in relationship to a self-identified level of current physical health among Iowa public school superintendents.

Discussion

The following observations were made concerning demographic variables, research questions, and hypotheses.

Demographic Variables

The demographic data collected in the study provided information for describing a typical Iowa public school superintendent. The typical Iowa public school superintendent was fifty to fifty-nine years old and had an Ed.S. degree. The typical superintendent served as a superintendent with building principals in a rural school district with a student enrollment of 800 to 1,499 students in Area Education Agency 11 which is located in central Iowa. The superintendent had been in school administration for over twenty years and had been in his present position for three to five years. He worked from fifty-one to fifty-five hours per week, exercised one to three hours per week, and considered himself in excellent health.

Research Questions

The first research question the study attempted to answer was: What is the frequency to which each of the stressors exist among Iowa public school superintendents? The stressor with the highest mean score by frequency responses was "supervising and coordinating the tasks of many people" (Stressor 2). "Complying with state, federal and organizational rules and policies" (Stressor 27) ranked second. "Preparing and allocating budget resources" (Stressor 21) and "feeling I have to participate in school activities outside of the normal working hours at the expense of my personal time" (Stressor 18) shared an

identical mean score and ranked third among the thirty-five stressors.

The second research question the study attempted to answer was: What is the intensity to which each of the stressors exist among Iowa public school superintendents? The stressor with the highest mean score by intensity response was "being involved in the collective bargaining process" (Stressor 24). The stressor with the second highest mean score was "complying with state, federal and organizational rules and policies" (Stressor 27), while "having to make decisions that affect the lives of individual people that I know (colleagues, staff, students, etc.)" (Stressor 17) ranked third among the thirty-five stressors.

Of the ten stressors with the highest mean scores according to intensity responses, seven of them were among the ten stressors with the highest mean scores according to frequency responses. The seven stressors which ranked among the top stressors according to both frequency and intensity responses were: "imposing excessively high expectations of myself" (Stressor 10), "having to make decisions that affect the lives of individual people that I know (colleagues, staff, students, etc.)" (Stressor 17), "feeling I have to participate in school activities outside of the normal working hours at the expense of my personal time" (Stressor 18), "preparing and allocating budget resources"

(Stressor 21), "being involved in the collective bargaining process" (Stressor 24), "complying with state, federal and organizational rules and policies" (Stressor 27), and "trying to gain public approval and/or financial support for school programs" (Stressor 35).

Three stressors which ranked in the top ten stressors according to frequency responses but did not rank in the top ten stressors according to intensity responses were "supervising and coordinating the tasks of many people" (Stressor 2), "writing memos, letters and communications" (Stressor 12), and "being interrupted by telephone calls" (Stressor 1). Stressor 2, Stressor 12, and Stressor 1 ranked eleventh, twenty-second, and twenty-fifth, respectively, according to intensity responses. The three stressors which ranked in the top ten stressors according to intensity responses but did not rank in the top ten stressors according to frequency responses were "trying to complete reports and paper work on time" (Stressor 32), "trying to resolve parent/school conflicts" (Stressor 20), and "evaluating staff member's performance" (Stressor 25). Stressor 32, Stressor 20, and Stressor 25 ranked eleventh, eighteenth, and twelfth, respectively, according to frequency responses. Among the top ten stressors according to both frequency and intensity responses, Stressor 12 "writing memos, letters and communications" and Stressor 1 "being interrupted by telephone calls" had the greatest

difference in rank comparing frequency and intensity responses.

Of the ten stressors with the lowest mean score according to both frequency and intensity responses, eight stressors were among the ten lowest stressors according to both response categories. The eight stressors were: "feeling that I am not fully qualified to handle my job" (Stressor 4), "knowing I can't get information needed to carry out my job properly" (Stressor 5), "trying to resolve differences between/among students" (Stressor 7), "feeling not enough is expected of me by the board members" (Stressor 8), "feeling that I have too much responsibility delegated to me by the board of education" (Stressor 19), "feeling that I have too little authority to carry out responsibilities assigned to me" (Stressor 22), "handling student discipline problems" (Stressor 23), and "being unclear on just what the scope and responsibilities of my job are" (Stressor 30).

Each of the five stress categorical factors identified by Swent were represented by the ten stressors with the highest mean scores according to frequency and intensity responses. According to frequency responses, four stressors fell into the administrative responsibility category, while three stressors fell into the administrative constraints category. Interpersonal relations, intrapersonal conflicts, and role expectations were represented by one stressor in

each stress categorical factor. According to intensity responses, four stressors fell into the administrative responsibility category. Administrative constraints and intrapersonal conflicts were represented by two stressors each, while interpersonal relations and role expectations were represented by one stressor for each factor.

The third research question the study attempted to answer was: What is the total mean frequency to which stress exists among Iowa public school superintendents by geographic location? Superintendents serving districts located in Area Education Agency 1, Area Education Agency 7, and Area Education Agency 10 reported the three highest total mean frequency responses to which stress existed. The three areas share adjacent boundaries in the northeast region of Iowa. Superintendents serving districts located in Area Education Agency 2 reported the lowest total mean frequency response. Area Education Agency 2 located in north central Iowa shares adjacent boundaries with two of the three agencies in which superintendents reported the highest mean frequency response.

The fourth research question the study attempted to answer was: What is the total mean intensity to which stress exists among Iowa public school superintendents by geographic location? Superintendents serving districts located in Area Education Agency 1, Area Education Agency 7, and Area Education Agency 10 reported the three highest

total mean intensity responses to which stress existed. The Area Education Agencies and geographical area where superintendents indicated the three highest total mean intensity responses were identical with the Area Education Agencies and geographical area where superintendents indicated the three highest total mean frequency responses. Likewise, superintendents in Area Education Agency 2 reported the lowest total mean intensity response, while they also reported the lowest total mean frequency response.

The fifth research question the study attempted to answer was: What percentage of total stress in the life of a superintendent in Iowa is estimated to be a result of the superintendent's job? Superintendents indicated that approximately two-thirds of the total stress in their lives resulted from their job. One-half of the respondents perceived that 80 percent or more of the total stress in their lives resulted from their job.

The sixth research question the study attempted to answer was: What various stress coping techniques have been used by Iowa public school superintendents? Stress coping activities were divided into three categories: (1) cognitive and psychological activities; (2) physiological activities; and (3) interpersonal and organizational management activities. Almost two-thirds of the respondents indicated that they used cognitive and psychological

activities as stress coping techniques. The most frequently used cognitive and psychological activities were: being involved in hobbies, leaving town to get totally away from the employment environment, spending time with family, and leaving school work and problems at school.

Slightly over one-fourth of the respondents indicated that they used physiological activities as stress coping techniques. Participating in exercise was the most popular physiological activity. Only two respondents indicated that they used techniques specifically for the purpose of relaxation. Seven respondents used alcohol or drugs as coping techniques.

Of the respondents, 5.8 percent used interpersonal and organizational management activities. Frequent responses in this least used category included: delegating work to the appropriate people, working with competent personnel, team management, and participating in professional organizations.

Hypotheses

Twenty-three hypotheses in the study were analyzed by various statistical methods. All the hypotheses were accepted at the .05 level of significance except Hypothesis Five. However, Hypotheses Two, Three, Five, Twelve, and Twenty will be further analyzed.

Hypothesis Two stated that there is no difference in the mean frequency of the five factors identified by Swent

among Iowa public school superintendents. Hypothesis Three stated that there is no difference in the mean intensity of the five factors identified by Swent among Iowa public school superintendents. According to a Pearson Correlation Coefficient comparison, there was a positive correlation between all factors by frequency and intensity responses. The range was from a high positive to a low positive correlation. The highest correlation was between role expectations and intrapersonal relations for both frequency and intensity responses. The high positive correlation for frequency responses was .7205 and for intensity responses was .7179. The lowest correlation was between interpersonal relations and administrative constraints for both frequency and intensity responses. The low positive correlation for frequency responses was .3824 and for intensity responses was .4466.

Hypothesis Five stated that there is no difference in the total mean intensity of stressors among the five identified age groups of Iowa public school superintendents. There was a difference in the total mean intensity of stressors among age groups of superintendents when tested by a one-way analysis of variance. There was no difference in the total mean intensity of stressors in three age groups when tested by a post hoc test using the Scheffe' procedure. However, there was a significant difference in the total mean intensity of stressors in the age groups of

forty to forty-nine and fifty to fifty-nine years.

Hypothesis Twelve stated that there is no difference in the total mean frequency of stressors among the three identified district descriptors among Iowa public school superintendents. There was no difference in the total mean frequency of stressors among the three identified district descriptors when tested by a one-way analysis of variance. However, there was a significant difference in the total mean frequency of stressors between the district descriptors of rural and urban when tested by a post hoc test using the Scheffe' procedure.

Hypothesis Twenty stated that there is no difference in the total mean frequency of stressors in the relationship to the number of hours of physical exercise per week among Iowa public school superintendents. There was no difference in the total mean frequency of stressors in the relationship to the number of hours of physical exercise per week when tested by a one-way analysis of variance. However, there was a significant difference in the total mean frequency of stressors between the exercise groups of four to six hours and seven to nine hours when tested by a post hoc test using the Scheffe' procedure.

Recommendations

1. The Iowa Association of School Administrators should provide additional inservice sessions regarding stress-coping techniques for Iowa public school

superintendents.

2. Further research should be conducted to determine the duration of the thirty-five stressors among Iowa public school superintendents.

3. A nationwide study should be conducted to determine the frequency and intensity of stressors and stress coping techniques among superintendents.

4. Further research should be conducted to determine the correlation between stress among superintendents and additional variables such as marital status, extent of involvement in a school wellness program, gross income of patrons in the school district, and the effects of mobility/immobility.

5. Further research should explore the contributing factors which may be related to the high stress level among Iowa public school superintendents serving in districts located in the northeast region of Iowa who indicated the highest stress level by geographic location.

6. Further research should explore contributing factors which may be related to the low stress level among Iowa public school superintendents serving in districts located in Area Education Agency 2 who indicated the lowest stress level by geographic location.

7. Further research should explore the relationship between stress among Iowa public school superintendents and the occurrence of economic difficulties such as bank

closings and farm foreclosures.

8. Further research should consider the frequency of stress among superintendents using a scale indicating the occurrence of stressors in terms of daily, weekly, monthly, quarterly, or annually.

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APPENDICES

APPENDIX A

CATEGORICAL STRESS FACTORS IDENTIFIED BY SWENT

Categorical Stress Factors Identified by Swent

Factors Intrinsic to Administration

1. Having my work frequently interrupted by staff members who want to talk
2. Being interrupted frequently by telephone calls
3. Writing memos, letters and other communications
4. Feeling that meetings take up too much time
5. Feeling that I have too heavy a work load, one that I cannot possibly finish during the normal day
6. Complying with state, federal and organizational rules and policies
7. Trying to complete reports and other paper work on time

Administrative Responsibility

1. Being involved in the collective bargaining process
2. Administering the negotiated contract (grievances, interpretations, etc.)
3. Speaking in front of groups
4. Supervising and coordinating the tasks of many people
5. Preparing and allocating budget resources
6. Evaluating staff members
7. Trying to gain public approval and/or financial support for school programs

Interpersonal Relations

1. Trying to resolve differences between/among staff members
2. Feeling staff members don't understand my goals and expectations
3. Trying to resolve differences with my superiors
4. Handling student discipline
5. Trying to resolve differences between/among students
6. Trying to influence my immediate supervisor's actions and decisions that affect me
7. Trying to resolve parent/school conflicts

Intrapersonal Conflicts

1. Feeling that the progress on my job is not what it should or could be
2. Feeling that I have too little authority to carry out the responsibilities assigned to me
3. Feeling that I am not fully qualified to handle my job
4. Knowing that I can't get information needed to handle my job
5. Having to make decisions that affect the lives of individual people that I know (colleagues, staff members, students, etc.)
6. Attempting to meet social expectations (housing, clubs, friends, etc.)
7. Imposing excessively high expectations on myself

Role Expectations

1. Feeling that I have too much responsibility delegated to me by my superior(s)
2. Feeling I have to participate in school activities outside of the normal working hours at the expense of my personal time
3. Being unclear on just what the scope and responsibilities of my job are
4. Not knowing what my supervisor thinks of me, or how he/she evaluates my performance
5. Feeling pressure for better job performance over and above what I think is reasonable
6. Feeling not enough is expected of me by my superior(s)
7. Thinking that I will not be able to satisfy the conflicting demands of those who have authority over me

APPENDIX B

QUESTIONNAIRE: ORIGINAL ADMINISTRATIVE STRESS INDEX

Administrative Stress Index

- A. School administrators have identified the following 35 work-related situations as sources of concern. It is possible that some of these situations bother you more than others. How much are **you** bothered by each of the situations listed below? Please circle the appropriate response using the following scale:

	Not Applicable	Rarely or Never Bothers Me	Occasionally Bothers Me	Bothers Me	
	NA	1	2	3	4 5
1. Being interrupted frequently by telephone calls.	NA	1	2	3	4 5
2. Supervising and coordinating the tasks of many people.	NA	1	2	3	4 5
3. Feeling staff members don't understand my goals and expectations.	NA	1	2	3	4 5
4. Feeling that I am not fully qualified to handle my job.	NA	1	2	3	4 5
5. Knowing I can't get information needed to carry out my job properly.	NA	1	2	3	4 5
6. Thinking that I will not be able to satisfy the conflicting demands of those who have authority over me.	NA	1	2	3	4 5
7. Trying to resolve differences between/among students.	NA	1	2	3	4 5
8. Feeling not enough is expected of me by my superiors.	NA	1	2	3	4 5
9. Having my work frequently interrupted by staff members who want to talk.	NA	1	2	3	4 5
10. Imposing excessively high expectations on myself.	NA	1	2	3	4 5
11. Feeling pressure for better job performance over and above what I think is reasonable.	NA	1	2	3	4 5
12. Writing memos, letters and other communications.	NA	1	2	3	4 5

- | | |
|---|--------------|
| 13. Trying to resolve differences with my superiors. | NA 1 2 3 4 5 |
| 14. Speaking in front of groups. | NA 1 2 3 4 5 |
| 15. Attempting to meet social expectations (housing, clubs, friends, etc.) | NA 1 2 3 4 5 |
| 16. Not knowing what my supervisor thinks of me, or how he/she evaluates my performance. | NA 1 2 3 4 5 |
| 17. Having to make decisions that affect the lives of individual people that I know (colleagues, staff members, students, etc.) | NA 1 2 3 4 5 |
| 18. Feeling that I have to participate in school activities outside of the normal working hours at the expense of my personal time. | NA 1 2 3 4 5 |
| 19. Feeling that I have too much responsibility delegated to me by my supervisor. | NA 1 2 3 4 5 |
| 20. Trying to resolve parent/school conflicts. | NA 1 2 3 4 5 |
| 21. Preparing and allocating budget resources. | NA 1 2 3 4 5 |
| 22. Feeling that I have too little authority to carry out responsibilities assigned to me. | NA 1 2 3 4 5 |
| 23. Handling student discipline problems. | NA 1 2 3 4 5 |
| 24. Being involved in the collective bargaining process. | NA 1 2 3 4 5 |
| 25. Evaluating staff members' performance. | NA 1 2 3 4 5 |
| 26. Feeling that I have too heavy a word load, one that I cannot possibly finish during the normal work day. | NA 1 2 3 4 5 |
| 27. Complying with state, federal, and organizational rules and policies. | NA 1 2 3 4 5 |
| 28. Feeling that the progress on my job is not what it should or could be. | NA 1 2 3 4 5 |
| 29. Administering the negotiated contract (grievances, interpretation, etc.) | NA 1 2 3 4 5 |
| 30. Being unclear on just what the scope and responsibilities of my job are. | NA 1 2 3 4 5 |

31. Feeling that meetings take up too much time. NA 1 2 3 4 5
32. Trying to complete reports and other paper work on time. NA 1 2 3 4 5
33. Trying to resolve differences between/ among staff members. NA 1 2 3 4 5
34. Trying to influence my immediate supervisor's actions and decisions that affect me. NA 1 2 3 4 5
35. Trying to gain public approval or financial support for school programs. NA 1 2 3 4 5

Other situations about your job that bother you:

_____ NA 1 2 3 4 5

_____ NA 1 2 3 4 5

B. May we please have the following information about you and your school district?

1. Age: _____ Under 30 _____ 30-39 _____ 40-49 _____ 50-59
 _____ 60 or over

2. Position:

_____ Elementary Principal
 _____ Junior High Principal
 _____ High School Principal
 _____ Superintendent
 _____ Supervisor of Instruction
 _____ Other (please specify) _____

3. Are you a full-time administrator? _____ Yes _____ No

4. Size of district by ADA: _____ 100-499 _____ 500-999
 _____ 1,000-2,999 _____ 3,000 and over

5. Size of school by ADA (if applicable): _____ 0-99

_____ 100-249 _____ 250-599 _____ 600-999
 _____ 1,000 and over

6. Sex: _____ Male _____ Female

7. Years in present position: _____ 1-2 _____ 3-5
_____ 6-10 _____ 11-15 _____ 16-20 _____ Over 20
8. Years in administration: _____ 1-2 _____ 3-5 _____ 6-10
_____ 11-15 _____ 16-20 _____ Over 20
9. Hours worked per week: _____ less than 40 _____ 40-56
_____ 46-50 _____ 51-55 _____ 56-60 _____ 61-65
_____ 66-70 _____ Over 70
10. Hours of physical exercise per week: _____ less than 1
_____ 1-3 _____ 4-6 _____ 7-9 _____ 10-12
_____ Over 12
11. Current physical health: (Excellent) 5 4 3 2 1
12. What percentage of the total stress in your life results from your job?
-
13. Recognizing that school administration is a demanding occupation, what ways have you personally found useful in handling the tensions and pressures of your job?

APPENDIX C

LETTER FROM DR. SWENT GRANTING PERMISSION TO USE THE
ADMINISTRATIVE STRESS INDEX IN THE STUDY



Education Service District

412 S. E. Dorion - Box 38 - Pendleton, Oregon 97801 - Phone 276-6616
Boyd Swent, Superintendent

District Board

Jack Jenkins, Chairman
Steve Bloom, Vice-Chairman
Lee Baggett
Bob Brown
Forest Rhinshart
Charles Rohde
Linda Shockman

May 30, 1985

James S. Botts, Superintendent
Fremont Community School District
Fremont, IA 52561

Dear Mr. Botts:

Enclosed please find a copy of my dissertation on the perceptions of administrative stress. I am also giving you permission to use the administrative stress index, a copy of which is contained in the dissertation.

Thank you for your reference citing on the synthesis of dissertation research in the area of administrative stress. I am looking forward to getting a copy of the article and taking a look at it.

Best wishes as you proceed toward the doctoral degree. That goal is both a worthwhile and a challenging one, and very frustrating at times. I know you will find it a great personal reward when you have completed the program.

If I can be of further assistance, please feel free to contact me.

Sincerely,

Boyd Swent, Superintendent
Education Service District

BS/bjw

Enc

cc: Walt Gmelch

An Equal Opportunity Employer

Special Education
Ernest Cristler, Jr., Director

Instructional Media
Charles McCullough, Director

Data Processing
William F. Taylor, Director

Career Education
Sam Pambrun, Director

APPENDIX D

QUESTIONNAIRE: MODIFIED ADMINISTRATIVE STRESS INDEX

MODIFIED ADMINISTRATIVE STRESS INDEX

195

A. School superintendents have identified the following 35 work-related situations as sources of concern. It's possible that some of the following situations occur more frequently than others and with varying degrees of intensity. **How frequently and with what degree of intensity are you bothered** by each of the situations listed below?

DIRECTIONS: Please circle the number that best describes your response for both **Frequency** and **Intensity** of each situation.

	Not Applicable	FREQUENCY					INTENSITY				
		Rarely	Occasionally	Frequently			Low	Moderate	High		
1. Being interrupted by telephone calls.	NA	1	2	3	4	5	1	2	3	4	5
2. Supervising and coordinating the tasks of many people.	NA	1	2	3	4	5	1	2	3	4	5
3. Feeling staff members don't understand my goals and expectations.	NA	1	2	3	4	5	1	2	3	4	5
4. Feeling that I am not fully qualified to handle my job.	NA	1	2	3	4	5	1	2	3	4	5
5. Knowing I can't get information needed to carry out my job properly.	NA	1	2	3	4	5	1	2	3	4	5
6. Thinking that I will not be able to satisfy the conflicting demands of those who have authority over me.	NA	1	2	3	4	5	1	2	3	4	5
7. Trying to resolve differences between/among students.	NA	1	2	3	4	5	1	2	3	4	5
8. Feeling not enough is expected of me by the board members	NA	1	2	3	4	5	1	2	3	4	5
9. Having my work interrupted by staff members who want to talk.	NA	1	2	3	4	5	1	2	3	4	5
10. Imposing excessively high expectations on myself	NA	1	2	3	4	5	1	2	3	4	5
11. Feeling pressure for better job performance over and above what I think is reasonable.	NA	1	2	3	4	5	1	2	3	4	5
12. Writing memos, letters and communications.	NA	1	2	3	4	5	1	2	3	4	5
13. Trying to resolve differences with my board members	NA	1	2	3	4	5	1	2	3	4	5
14. Speaking in front of groups.	NA	1	2	3	4	5	1	2	3	4	5
15. Attempting to meet social expectations (housing, clubs, friends, etc.)	NA	1	2	3	4	5	1	2	3	4	5
16. Not knowing what my board thinks of me, or how they evaluate my performance.	NA	1	2	3	4	5	1	2	3	4	5
17. Having to make decisions that affect the lives of individual people that I know (colleagues, staff members, students, etc.)	NA	1	2	3	4	5	1	2	3	4	5
18. Feeling I have to participate in school activities outside of the normal working hours at the expense of my personal time.	NA	1	2	3	4	5	1	2	3	4	5
19. Feeling that I have too much responsibility delegated to me by the board of education.	NA	1	2	3	4	5	1	2	3	4	5
20. Trying to resolve parent/school conflicts	NA	1	2	3	4	5	1	2	3	4	5
21. Preparing and allocating budget resources	NA	1	2	3	4	5	1	2	3	4	5
22. Feeling that I have too little authority to carry out responsibilities assigned to me	NA	1	2	3	4	5	1	2	3	4	5
23. Handling student discipline problems.	NA	1	2	3	4	5	1	2	3	4	5
24. Being involved in the collective bargaining process	NA	1	2	3	4	5	1	2	3	4	5
25. Evaluating staff member's performance.	NA	1	2	3	4	5	1	2	3	4	5

26. Feeling that I have too heavy a work load, one that I cannot possibly finish during the normal work day.	NA	1	2	3	4	5	1	2	3	4	5
27. Complying with state, federal and organizational rules and policies.	NA	1	2	3	4	5	1	2	3	4	5
28. Feeling that the progress of my job is not what it should or could be.	NA	1	2	3	4	5	1	2	3	4	5
29. Administering the negotiated contract (grievances, interpretation, etc.)	NA	1	2	3	4	5	1	2	3	4	5
30. Being unclear on just what the scope and responsibilities of my job are.	NA	1	2	3	4	5	1	2	3	4	5
31. Feeling that meetings take up too much time.	NA	1	2	3	4	5	1	2	3	4	5
32. Trying to complete reports and paper work on time.	NA	1	2	3	4	5	1	2	3	4	5
33. Trying to resolve differences between/ among staff members	NA	1	2	3	4	5	1	2	3	4	5
34. Trying to influence my board's actions and decisions that affect me.	NA	1	2	3	4	5	1	2	3	4	5
35. Trying to gain public approval and/or financial support for school programs.	NA	1	2	3	4	5	1	2	3	4	5
Other situations about your job that bother you. (List)	NA	1	2	3	4	5	1	2	3	4	5
	NA	1	2	3	4	5	1	2	3	4	5

B. May we please have the following information about you and your school district?

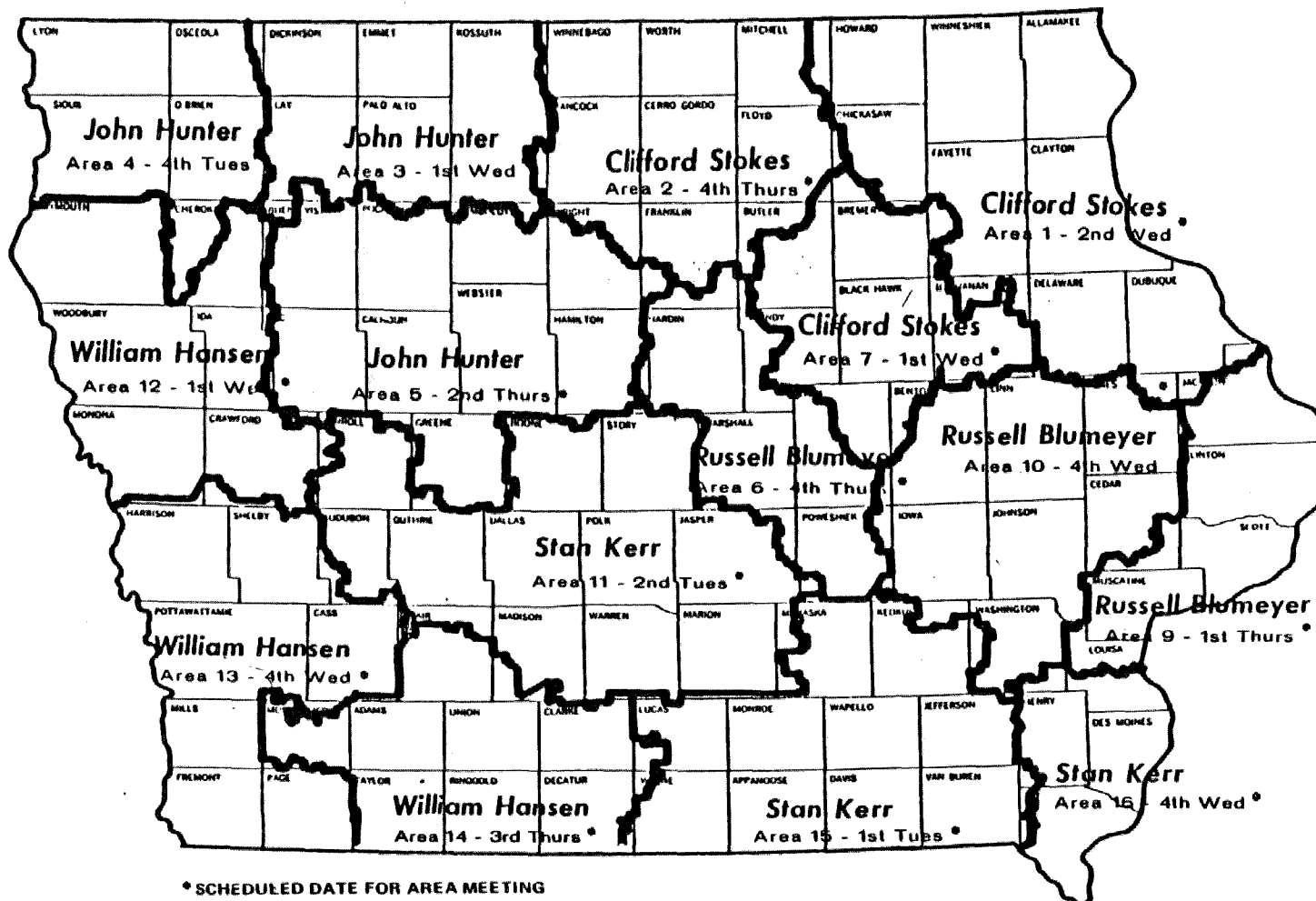
1. Age: _____ Under 30 _____ 30-39 _____ 40-49 _____ 50-59 _____ 60 or over
2. Which **one** administrative category **best** describes your superintendency?
 - _____ superintendent with building principals
 - _____ sole administrator in a district
 - _____ superintendent in two districts
 - _____ superintendent/elementary principal combination
 - _____ superintendent/secondary principal combination
3. The highest degree you hold?
 - _____ M.A.
 - _____ Educational Specialist Degree
 - _____ Ed.D or Ph.D.
4. Size of District: _____ 0-499 _____ 500-799 _____ 800-1499 _____ 1500 and over
5. The Area Education Agency in which your district is located? _____
6. The number of people you directly supervise/evaluate: _____ Non-Certified _____ Certificated
7. How would you describe your district? _____ rural _____ urban _____ suburban
8. Years in your present position: _____ 1-2 _____ 3-5 _____ 6-10 _____ 11-15
 _____ 16-20 _____ over 20
9. Years in administration: _____ 1-2 _____ 3-5 _____ 6-10 _____ 11-15 _____ 16-20
 _____ over 20
10. Hours worked per week: _____ less than 40 _____ 40-45 _____ 46-50 _____ 51-55
 _____ 56-60 _____ 61-65 _____ 66-70 _____ over 70
11. Hours of physical exercise per week: _____ less than 1 _____ 1-3 _____ 4-6 _____ 7-9
 _____ 10-12 _____ over 12
12. Current physical health: (Excellent) 5 4 3 2 1 (Poor) Please circle one number.
13. What percentage of total stress in your life would you estimate is the result of your job? _____%
14. Recognizing that the superintendency is a demanding occupation, what ways have you personally found useful in handling the tensions and pressures of your job?

APPENDIX E

MAP OF IOWA BY AREA EDUCATION AGENCIES

REGIONAL CONSULTANTS 1984-1985

15 Areas for the Improvement of Education



Department of Public Instruction
 Robert D. Benton, Ed.D., Superintendent
 Instruction and Professional Education Branch
 Donald V. Cox, Associate Superintendent
 Virgil Kellogg, Director, Field Services and Supervision Division

APPENDIX F

LETTERS OF SUPPORT FROM DR. SWENT AND DR. GMELCH



Education Service District

412 S. E. Dorion • Box 38 • Pendleton, Oregon 97801 • Phone 276-6616
Boyd Swent, Superintendent

District Board

Lee Baggett, Chairman
Bob Brown, Vice-Chairman
Steve Bloom
Jack Jenkins
Forest Rhinehart
Charles Rohde
Linda Shockman

September 23, 1985

Jim Botts, Superintendent
Fremont Community School District
P. O. Box 68
Fremont, IA 52561

Dear Jim:

After reviewing your modifications of the Administrative Stress Index, I have the following comments and/or questions:

1. I believe the focus of your research, as it relates to frequency and intensity of the stressor, will be valuable information and support the previous work that was done.
2. The response to frequency may better be served by looking at options that might include daily, weekly, monthly, quarterly, annually. This would give you a common framework from which to evaluate the frequency. As we discussed on the phone, "frequently" may vary considerably from the respondent's perception.
3. It does not appear that there are similar common definitions that might be used in relationship to intensity. Therefore, the Likert Scale is probably the most appropriate.
4. Regarding the above two comments, you may wish to contact someone who is an evaluation specialist and works regularly with questionnaires. They may have a better suggestion.
5. Question B-2 needs to reflect an option for the superintendent who has several administrators within his or her district.

An Equal Opportunity Employer

Special Education
Ernest Cristler, Jr., Director

Instructional Media
Charles McCullough, Director

Data Processing
William F. Taylor, Director

Career Education
Sam Pambrun, Director

Special Programs
Kay Fenimore-Smith

Jim Botts, Superintendent
September 23, 1985
Page 2

6. In the collection of information under "B", to the best of my knowledge no one has asked the question regarding marriage and divorce. Although I have not done a recent search of the literature, I would feel confident that an individual support system may have a direct relationship upon their perception of stress. In many cases that support system is directly related to the family and/or spouse. This may be an area you would wish to collect some data.

In closing, let me indicate my support of your research and willingness to provide any assistance that I can. I also will be very interested in the results that you receive from your research and wish you the best of luck in the pursuit of your professional goals!

Sincerely,

Boyd Swent

Boyd Swent, Superintendent
Education Service District

BS/bjw

cc: Walt Gmelch

FREMONT COMMUNITY SCHOOL DISTRICT

Area Code 515-933-4482

No answer

FREMONT, IOWA 52561

August 31, 1985

COLLEGE OF EDUCATION

SEP 9 1985

WASH. STATE UNIVERSITY

Dr. Walter Gmelch
College of Education
Washington State University
Pullman, Washington 99164-2110

Dear Dr. Gmelch:

I am very interested in and impressed with your research and numerous publications concerning stress and school administrators.

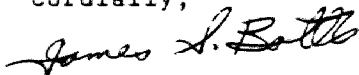
I am a doctoral candidate at Drake University, Des Moines, Iowa. My doctoral dissertation is entitled "Self Perceptions of Iowa Public School Superintendents Toward Occupational Stress."

Based upon a recommendation for further research in Dr. Boyd Swent's dissertation "An Exploratory Study of the Perceptions of Oregon School Administrators on Occupational Sources of Stress" I am modifying the A.S.I. to adapt to my study. An additional scale that asks responding superintendents to identify the intensity of each stressor is being incorporated in the questionnaire.

With your research experience and knowledge concerning stress and school administrators, your critique of the modified A. S. I. will be invaluable. Please see the enclosed modified A.S.I.

Thank you for your assistance and time. I am looking forward to your comments and suggestions.

Cordially,



James S. Botts, Supt.

Jim - Sorry for not getting back to you sooner. I was out of State for a while & then tried to call the above phone # with no luck. It may be too late by now but let me reassure you that the direction you are going with the intensity scale is an excellent one. This is an additional qualifier which gives greater validity to the study of administrative

Stess.

Again sorry for my late response.

Good luck!

Walt Smith
Associate Dean
Research & Field Services